ABSTRACT OF THESIS

A SURVEY OF PLACEMENT AND FOLLOW-UP METHODS USED IN THE EMPLOYMENT OF THE VOCATIONALLY HANDICAPPED IN NORTHEASTERN COLORADO

Submitted by

Joseph V. Morton

In partial fulfillment of the requirements

for the Degree of Master of Education

Colorado

Agricultural and Mechanical College

Fort Collins, Colorado

August, 1947

This study was made in order to survey the placement facilities for vocationally handicapped citizens in Northeastern Colorado and from these findings to formulate implications and recommendations for improvements of employment opportunities for these disabled people.

The problem

In what respect do present employment opportunities offer suitable placement facilities for the vocationally handicapped in Northeastern Colorado?

Problem analysis.--In order to answer the above question the following information will be necessary:

1. What types of handicapped individuals have been referred to the vocational rehabilitation agency in Greeley for consideration?
2. What remedial measures have been employed to correct the above conditions?
3. What employment was found for the various types of handicapped individuals?
4. What methods have been used in following the training program and placement of the clients?

Delimitation.--This report deals only with 40 of the vocationally handicapped who were residents of Northeastern Colorado at the time service was rendered by the counselor. It does not deal with physically normal people nor is it particularly concerned with the employment of the occupationally impaired in industries ordinarily typified in

the body of literature as publicity for the vocationally handicapped.

The study is delimited to those over 16 years of age with mental, emotional or physical disabilities construed by examining doctors, medical specialists and the counselor to be vocational handicaps.

In general, physical disabilities have been of primary concern in determining not only eligibility but also rehabilitational feasibility for prospective clientele.

Prior to July 1, 1946, 57.4 per cent of the 54 referrals receipted were classified as orthopedic,--in contrast to 48.2 per cent of the 345 referred claimants during the period July 1, 1946 to July 1, 1947. The number of clientele diagnosed as visually impaired increased from three to 14, but the percentage of the total number of referrals decreased from 5.5 to 4.9 per cent. Those reported to the agency with loss of hearing, however, increased from 1.9 to 4.5 per cent during the last period. The cardiac and tuberculous referrals also increased in a slight measure during the fiscal year, 1947.

The total number referred to the agency during all the years prior to July 1, 1947, which was 399, constituted the statistical matrix from which the 62 rehabilitated claimants, or rehabilitants as they are often designated, were selected. Twenty-two of these 62 were precluded from the final sample because they were placed in areas outside limits available to the study.

The remedial measures which were employed to correct

or alleviate the circumstances at the time of the survey included prosthesis, vocational training in institutions and places of business, counseling and guidance, and the actual direct placement for only a few of those rehabilitated.

Five of the rehabilitated cases were provided, in some measure, a degree of physical restoration. Dentures, eye-glasses, artificial legs, repair and "boot" for the difference between the sum received on a tradein allowance and the purchase price of a new hearing aid, and a corrective corset or "brace" were provided for these clientele.

Fourteen of the 40 were given vocational training of various types. Six matriculated in colleges and universities, three in business colleges, one in a private trade school, while the remaining four were trained in business establishments.

Each of the 40 were counseled during the process of their application for assistance; and the therapeutic aspects of the counseling process so ably advocated by Dr. Carl Rogers (30:18) in his new directive technique of the interview were emphasized. The actual placement process was, insofar as consistency with final suitable placement policy permitted, the individual responsibility of clientele. In this manner the development of vocational independence was fostered. In the few cases where individual effort failed, assistance in actual placement was rendered, but only as a last resort.

The actual type of employment found for these 40 individuals was extremely varied as a whole. Only in the occupations designated as "farm-hand" or "ranch-hand" were there

more than three individuals placed. The list of positions occupied by clientele at closure of the survey was a long one, of which the following are only a few: commercial artists, truck driver, house painter, seamstress in alteration department of feminine apparel shop, lawyer, laborer in sugar beet factory, hostess in a tea room, automobile mechanic, school teacher and watch repairman.

The methods used in following the training program and placement of clientele were distinctly different in each of the two services rendered. In the first instance, the method was of necessity comprised of delegated functions. The lack of personnel and plant equipment of the local rehabilitation agency precluded its direct rendering of this educational service.

The methods of claimant placement varied according to the needs of clientele. But if a general hypothesis could be formulated in the quest for suitable employment, it would probably be indirect placement as the guiding principle in the development of vocational independence of clientele. Cooperation with other agencies such as the local Colorado State Employment Offices and the training agencies themselves facilitated a number of suitable placements. All in all, present employment opportunities would appear to offer many suitable placement facilities for the vocationally handicapped, although the exact adequacy is a variable quantity changing from day to day and which is consequently an indeterminate one over a period of time.

Recommendations

The proposals herein advanced were suggested only as general suggestions in order that extenuating circumstances may embrace the worthy client for whom no hard and fast rules can conceivably provide "for the deviate of deviates."

The incorporation of more provisions to provide for the vocational training of clientele in public and private schools and for changes in lay attitudes toward the disabled to those of acceptance rather than those of toleration are advocated. The professional recommendations are mainly related to the application of the non-directive technique of the interview and increased emphasis on vocational aspects of training.

Workable suggestions for implementing changes in lay attitudes toward the disabled include an elaborate program of adult education among parent teacher associations since the most effective teaching for the growing infant and small child of pre-school age is that practiced by their parents. A supplementary and complementary program of instruction to be concurrently incorporarated in the educational program of the primary grades would also be most advisable.

A more specific suggestion of contemporaneous vocational moment is the immediate implementation of this ideal by a carefully formulated program of publicity through the following channels within the studied area:

1. Radio broadcasting from transmitters located in Greeley, Fort Collins, Boulder, and Sterling.

2. Newspaper publicity in the many county weeklies, school papers, and city dailies.

3. Exhibition of intelligently directed films of educational and inspirational nature.

4. Programs of appropriate speeches to interested public groups.

5. Intensity of emphasis upon proper placement by the serving agency of rehabilitation in order that the employing public and the general population may be convinced by example of the contribution that the disabled have to offer for the common welfare.

Application of Rogerian concept (non-directive technique of the interview).--While the psychotherapeutic value of the non-directive technique of the interview is recognized, lack of time delimits its application in practice. Insofar as practicable, however, the application of the Rogerian concept as defined below is the recommended goal.

> Effective counseling consists of a definitely structured, permissive relationship which allows the client to gain an understanding of himself to a degree which enables him to take positive steps in the light of his new orientation. This hypothesis has a natural corollary, that all the techniques used should aim toward developing this free and permissive relationship, this understanding of self in the counseling and other relationships, and this tendency toward positive, self-initiated action (30:18).

Recommendations for further study

When additional appropriations are available:

1. To what extent will the tuberculous segment of the impaired benefit from the state-wide employment of a supervisor of tuberculosis by the Rehabilitation Service?

2. In what manner may a state-wide administrator of standardized vocational tests function most efficiently should he be engaged by the antecedent agency?

3. Is an expeditious subdivision of existing sectional State areas of rehabilitational endeavor justified, and if so, what proposals may be advanced?

4. What are the advantages of a state-wide study of occupations as facilitating agents for suitable placement of the impaired?

5. What modifications in the application of the Baruch plan for a community rehabilitation and service center might prove feasible for the communities of which Northeastern Colorado is composed?

T H E S I S

A SURVEY OF PLACEMENT AND FOLLOW-UP METHODS USED IN THE EMPLOYMENT OF THE VOCATIONALLY HANDICAPPED IN NORTHEASTERN COLORADO

Submitted by

Joseph V. Morton

In partial fulfillment of the requirements

for the Degree of Master of Education

Colorado

Agricultural and Mechanical College

Fort Collins, Colorado

August, 1947

COLORADO AGRICULTURAL AND MECHANICAL COLLEGE

AUGUST 1947

I HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER MY SUPERVISION BY JOSEPH V. MORTON

ENTITLED A SURVEY OF PLACEMENT AND FOLLOW-UP METHODS USED IN THE EMPLOYMENT OF THE VOCATIONALLY HANDICAPPED IN NORTHEASTERN COLORADO

BE ACCEPTED AS FULFILLING THIS PART OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION

MAJORING IN GUIDANCE AND COUNSELING

CREDITS 6

George A. Comstock
In Charge of Thesis

APPROVED David H Morgan
Head of Department

Examination Satisfactory

Committee on Final Examination

Herb Heilig
Cecil O. Samuelson
Walter P. McClanahan
D H Morgan
George A. Comstock

H. E. Hendricks
Dean of the Graduate School

ACKNOWLEDGMENTS

The writer acknowledges his sincere appreciation for the inspiration he received from Dr. David H. Morgan, Head of the Department of Psychology and Education of Colorado Agricultural and Mechanical College, under whose thoughtful and considerate guidance a rather nebulous set of ideals and personal convictions were crystallized into what the writer, in all humility, offers as his contribution to the cause of the disabled.

He also wishes to express his gratitude to Dr. Charles F. Towne, Deputy Superintendent of Schools, Providence, Rhode Island, whose class, Organization and Administration of Guidance, he was fortunate in attending. The privilege of hearing once again a gentleman of the old school, a chassical scholar of Greek and Latin, reminiscent of his father, whose ultra-modern knowledge of counseling and guidance is tempered by his wonderful philosophy evolved from a half century of experience and education in evoking from students and employees the best that is in them.

The writer is indebted also to Dr. James G. Hodgson, Librarian; Mr. George A. Comstock, Associate Professor of Psychology and Education; and Mr. Llewellyn A. Moorehouse, former Head of the Department of Economics, Sociology and History; all of Colorado Agricultural and

Mechanical College, for their understanding and sympathetic assistance in the present and in the years gone by.

The writer has not forgotten the generous action of the following members of the Colorado State Board for Vocational Education: Mr. B. C. Essig, Chairman, of Denver, Colorado, representing Distributive Occupations; Mr. C. S. Birkins of Romeo, Colorado, representing Agriculture; Mr. C. J. Hinkley of Colorado Springs, Colorado, representing Employees; and Mrs. Mary H. Doerges of Cortez, Colorado, representing Homemaking. Their decision to permit his leave from duty which enabled him to devote the requisite time to this study and accompanying academic courses of relevancy, was considerately implemented by Mr. Ernest C. Comstock, Executive Director, and Mr. Dorsey F. Richardson, State Supervisor of Vocational Rehabilitation; and made this study possible; without which, the nebulous ideals and vague conceptions of the writer could never have been clarified into the personal convictions embodied in this treatise and which he now realizes have always been a profound part of his philosophy of life.

Dr. Henry H. Kessler, world renowned orthopedic consultant and cineplastic surgeon, whom the writer has met only a few times and heard speak but twice, has rendered a memorable service to the disabled in his bold and dramatic pioneering into scientific

surgical and orthopedic research and in his fearless writings and speeches. He, perhaps more effectively than any other individual, has sponsored the cause of the disabled as a sincere friend, and as one of the disabled, the author extends his thanks in writing. To others who have so understandingly delineated the problems of the impaired and who have advanced proposals for their solution as exemplified by Louise Neuschutz, who writes from the poignancy of personal experience in sustaining a noticeable impairment, much credit is also due.

Ordinarily, perhaps, one would hesitate to acknowledge his indebtedness to an author, but the memorable progress Dr. Carl Rogers has achieved by psychotherapy in the treatment of the emotionally imbalanced has so benevolently influenced the development of maturity by the disabled in dealing with fellow members of society that he surely deserves mention also.

In fact, the imperfectly understood possibilities for dovetailing the ideals and principles of Dr. Rogers and Dr. Kessler relevant to the vocationally impaired of this problem, offers a challenge which was accepted in the Review of Literature. The ethics and goals to which these two men of letters and men of practicable achievement aspire, offer a measure of occupational salvation for the impaired and for the general welfare of society through effective utilization

of its precious manpower. The divine old French proverb that "to understand is to forgive" is always apropos and these two gentlemen should be rewarded for their part in clarifying and dispelling much of the mutual misunderstanding which still exists between society and the handicapped as a vocational entity.

To that large segment of the public which the counselor has come to know as humane and enlightened in his earnest efforts to vocationally rehabilitate the disabled, and in his gathering of material for this treatise, appreciation for rendered service is hereby acknowledged.

The actual composition of this thesis and the exposition of its many hypotheses could not have been achieved without the long hours of ungrudging assistance and the many splendid suggestions proffered by the wife of the writer, and he appreciates this opportunity to express his gratitude.

In memory of the many sacrifices which the parents of the writer uncomplainingly made for the many years of his basic education, without which this treatise would never have come into being, a word of appreciation has long been due.

Finally, the writer as a counselor to the disabled, wishes to express his gratitude to those forever nameless citizens of Northeastern Colorado for the privilege and pleasure of having worked with them. Mutually

cooperative efforts to solve their problems provided the basis upon which this study was formulated and to whom as representatives of the disabled, this treatise is respectfully dedicated. It is particularly in the hope that the suggestions herein presented may, if only in a small measure, enable the concerned parties to resolve their environmental difficulties through mutual understanding of the perplexing problems of the play and interplay of social factors involved. In this manner, perhaps, the welfare of society in general, and that of the obscure, impaired genius in particular, may be mutually advanced by easing the path to greatness for such a one so that he may take his place with those "debilitated" benefactors of mankind: Thomas Edison and Steinmetz and Beethoven, on the dusty pages of history.

TABLE OF CONTENTS

TABLE OF CONTENTS.--continued.

TABLE OF CONTENTS.--continued

TABLE OF CONTENTS.--continued.

LIST OF TABLES

LIST OF TABLES.--Continued

LIST OF FIGURES

Chapter I

INTRODUCTION

Since Northeastern Colorado is predominantly an area of small cities and is devoted principally to agricultural pursuits the employment problems encountered in the placement of the vocationally handicapped are similar, in a measure, to those of other primarily rural sections of the Nation. They are conversely, distinctively different and rather more difficult in nature to plan than proper placement of the impaired in urban communities. The importance of this distinction and the need for study is readily apparent to one who has reviewed the literature in the field and who is also intimately concerned with suitable and enduring employment of the disabled in small centers of population.

The not inconsiderable volume of publicity dealing with the occupationally impaired has great virtue and is of inestimable value to one who would help these industrially and professionally disadvantaged and is in fact of infinite worth and essentiality to a just and compassionate understanding of the problem.

The priceless data of previous investigations, however, have naturally been largely gathered from

industrial studies by virtue of the appropriateness of applied relevancies to large concerns in which considerable numbers of the occupationally impaired could be easily placed. Another logical consideration in favor of the selection of big concerns for such studies was the employment opportunities for the handicapped inherent in the specialization of endeavor so extensively and so successfully utilized in mass production. The layman can easily comprehend the managerial advantages of assigning a particular task to one worker and the facility with which a new worker can master a simple hierarchy of reflex actions rather than a complicated intricate task composed of myriad and difficult jobs.

Although an unusual example could undoubtedly be taken from any assembly line, one relevant to the impaired is the following: a bookkeeper in a large concern illustrates the reason for employment of the disabled in big industry rather than in small concerns. In a small business a bookkeeper is usually expected to perform such duties as fixing the furnace, cleaning snow from the sidewalks during the winter and other manual labor. Contrariwise, a huge establishment hires a bookkeeper for one purpose and one purpose only and that is to keep books. There simply are no other essential, but unrelated, vocational duties. Consequently, once a handicapped individual has been placed in a large concern in an employment compatible with his disability he has

all the job assets possessed by a physically normal individual in retaining that employment and in advancing in his chosen profession. Future technological changes, of course, may be more disastrous to such a one but these are ordinarily beyond the province of the counselor since they involve prophecy.

The problems of placement in small communities and in agricultural pursuits are, therefore, very definitely worthy of study by those engaged in such placement both from the viewpoint of the individual personally concerned and from the point of view of the counselor. Placement in such cases for the disabled must be made with extreme care and each of the essential duties must be carefully scrutinized for compatibility with the disability.

Then too, the acceptance of the vocationally handicapped by the prospective employer and fellow associates-to-be is often a more difficult matter in small industry. The need for selling each employer the idea of hiring the handicapped, for each of the disabled to be placed, constitutes a job of no small magnitude. In a large concern, on the contrary, the successful placement of one client may open new vistas for many additional future placements.

Additional difficulties distinctive to the proper employment of such persons are entailed by the desire of, and frequent necessity for, the impaired to

live in or nearby large metropolitan areas with adequate hospital facilities and other features so often indispensable in the treatment and care of their disabilities.

The problem

In what respect do present employment opportunities offer suitable placement facilities for the vocationally handicapped of Northeastern Colorado?

Problem analysis.--In order to answer the above question, the following information will be necessary:

1. What types of handicapped individuals have been referred to the vocational rehabilitation agency in Greeley for consideration?

2. What remedial measures have been employed to correct the above conditions?

3. What employment was found for the various types of handicapped individuals?

4. What methods have been used in following the training program and placement of the clients?

Setting of study.--The potential magnitude of this problem in the State of Colorado is indicated by the fact that an estimated 8,000 citizens are vocationally handicapped and that 2,000 are probably added to this occupationally disadvantaged group every year as better methods of diagnosis are devised and more adequate reports made. As a counsellor in the field,

the writer has been very much concerned with the problem of suitable placement for the vocationally impaired in the following 14 counties in Northeastern Colorado 1/.

Adams (exclusive of the Denver metropolitan area)
Arapahoe (exclusive of the Denver metropolitan area)
Cheyenne
Jackson
Kit Carson
Larimer
Lincoln
Logan
Morgan
Phillips
Sedgwick
Washington
Weld
Yuma

Delimitation.--This report deals only with 40 of the vocationally handicapped who were residents of Northeastern Colorado at the time service was rendered by the counselor. It does not deal with physically normal people nor is it particularly concerned with the employment of the occupationally impaired in industries ordinarily typified in the body of literature as publicity for the industrially disadvantaged.

1/ See map in Appendix A

This study is delimited to those over 16 years of age with mental, emotional, or physical disabilities construed by examining doctors, medical specialists and the counselor to be vocational handicaps. It is exclusively confined to the placement of these 40 occupationally impaired indigenous to this section of Colorado.

Disabled veterans are not included in the study since they comprise a specialized group entirely separate and apart from that of the disabled civilians. Special provisions for such veterans have been made and the inescapable inclusion of the disability pension in itself constitutes a distinctive problem, unique in the vocational field and alien to this study.

In general, physical disabilities have been of primary concern in determining not only eligibility but also rehabilitational feasibility for prospective clientele. Mental subnormalities and emotional inbalances are, it is true, often eligible attributes qualifying their possessor for rehabilitation assistance, but their possessors are often unemployables by virtue of vocational instability and their consequent necessity for constant supervision which is simply not available.

Definition of terms

The terms "disadvantaged", "impaired", "disabled" and "vocationally handicapped" are used

synonomously and interchangeably unless specified to the contrary. In the event that unique situations impel its usage "employment" will describe the mere securement of employment but ordinarily its mention will be invariably associated with the adjective suitable or appropriate.

For the purpose of this study the customary definition of "rehabilitant" as a disabled one who has been completely rehabilitated vocationally was unconditionally accepted in this treatise.

The descriptive connotation of "client" with its implications of rendered service was wholeheartedly embraced in the thinking of the writer, and this concept of implicit professional respect for prospective rehabilitants naturally persists throughout this study. "Client" also logically pertains to rehabilitants, to those in the process of the attainment of vocational independence and those with an unsatisfied need for ultimate suitable placement.

"Vocationally handicapped" is actually, insofar as the vocational rehabilitation agency serving the delineated area of the study was concerned, the criterion upon which eligibility for its services is fundamentally based. One may easily incur, or previously have incurred, a minor disability or impairment which would probably be of no vocational significance. While such a trivial defect, however, might not be fraught with importance in the choice of, preparation for, entrance

into, or ensuing occupational progress of its possessor, each case is a highly individualized matter for which generalizations are meaningless.

Finally, the basic definitive consideration upon which this study was prepared involves the decision of what constitutes "vocational rehabilitation". This difficult decision is one in which judgment and matured opinion is a necessity, for each and every case. The development of this matured judgment and ability to make wise decisions can be facilitated through a review of previous studies on the subject. For this, and other reasons to be presented upon a more appropriate occasion, the review of literature will be rather fully presented and in rather meticulous detail, since in the opinion of the writer, a knowledge of legislative and social evolution relevant to this problem is essential to its understanding and the comprehension of the myriad associated problems of interwoven implications with pertinent economic, occupational and civic considerations.

Chapter II

REVIEW OF LITERATURE

The conservation of humanity for economic productivity has a youthful tradition which owes its inception to ancient European efforts to restore its war-wounded manpower to full martial strength once again (11).

Among the earliest continental works on the subject was an authoritative recapitulation of re-educational experiments on Frenchmen injured in defense of the motherland during the bloody days of World War I. This epochal contribution to the literature was edited and partially written by Jean Camus during the post-war year of 1919 (11).

In the transplantation of the rehabilitation concept from the European area to these United States the initial native impetus was individual in origin and in time these individual efforts evolved into privately organized agencies which in turn were gradually supplemented by the genesis of state and finally federal organizations (5).

Progenesis of federal legislative development

A contemporaneous development during these

formative years was the founding of an organization in New York City in 1917 entitled the "Red Cross Institute for Crippled and Disabled Men" for the avowed purpose of research and demonstration in rehabilitation work. Under the leadership of Douglas C. McMurtrie this organization became active in sponsoring State legislation for vocational rehabilitation. A model bill was subsequently designed which was a legal model upon which several States patterned drafts for ensuing legislation (4:165).

The State of Massachusetts, however, was the first to enact a relatively comprehensive statute. In 1918 the State Legislature passed an act to provide for the training of persons whose capacity to earn a living had been destroyed or impaired through industrial accident (4:165).

In the following two years, 12 other states enacted vocational rehabilitation statutes, six of which had actually functioning legislation (42:165).

Historical development of federal legislation

Dr. Lloyd E. Blauch, who has served as a principal educational specialist on the staff of the Advisory Committee on Education, originally known as the President's Committee on Vocational Education, stated that the entry of organized society into the field of vocational rehabilitation was a gradual one necessitated by the frequent individual inability of one with a

handicap to fit himself independently for a new occupation or to return to his accustomed position (5:3).

Prior to the establishment of Federal legislation a few states had enacted inadequate legislation which superficially provided a measure of occupational restoration for certain of their citizens (5:3). The pre-war year of 1911 was perhaps memorable in that it characterized the adoption of these signal state legislative acts.

This slow evolutionary progress of legal action by Federal and State bodies was analogously spurned on the Federal level by the passage of the Smith-Sears Act in 1918 (2:3). This Act provided for the vocational rehabilitation and return to civil employment of disabled persons discharged from the military and naval forces of the United States (3:3).

These unobtrusively developed State acts culminated Federally in a series of abortive attempts to enact national legislation. Three months after the passage of the Smith-Sears Act, Senator Hoke Smith of Georgia introduced a Senate bill to provide for the promotion of the rehabilitation of persons disabled in industry or otherwise and their return to civilian employment. William Bankhead of Alabama concurrently introduced a similar bill in the House of Representatives. Committee hearings were held with favorable

results but Congress ignored them (4:166).

The far-sighted idealists who pioneered these early Congressional legislative attempts were motivated by a variety of extremely practical considerations: the dual nature of the economic loss entailed by disabled workers--he ceased to contribute to economic progress and he frequently became a ward of society and a corresponding social waste. His dependents also became charges upon the society he should help to nurture. Furthermore, his children, if any, had to labor prematurely for sustenance (4:166). These early day vocational rehabilitation protagonists also stressed the preciousness of humanity as a national resource and the need for its vocational conservation for the defense of the country in the inexorable struggle for supremacy among the nations of the world (4:166-167).

Among the other claims advanced by these pioneers in legislation were the contingency of the completion of the Smith-Hughes Act upon the passage of this act and the pre-existence of the legal machinery for the implementation of the proposed legislation which was created by the passage of the Smith-Hughes bill (4:167).

The whole-hearted approval of this bill by many diverse interests was attested by the following sponsors (34:167).

1. The American Association for Labor Legislation.
2. The American Museum of Safety.

3. The United States Employees' Compensation Commission.
4. The American Federation of Labor.
5. The National Association of Manufacturers.
6. The New York State Industrial Commission.
7. The Federal Board for Vocational Education.
8. The Red Cross Institute for Crippled and Disabled Men.

In the ensuing 66th Congress the Smith bill was introduced in the Senate while the Fess bill in the House of Representatives was concurrently enjoying favorable committee reports. Among the notable protagonists in the Senate were Hoke Smith of Georgia, William Kenyon of Iowa, and Kenneth McKellar of Tennessee, and the staunchest defenders in the House included Simeon Fess of Ohio, William Bankhead of Alabama, Horace Tenner of Iowa, and John Nolan of California (34:166-167).

The upper chamber opposition of a generation ago was voiced principally by three men: Senator William King of Utah, Joseph Frelinghuysen of New Jersey, and Laurence Sherman of Illinois (4:167). Their expressed views have been familiar to workers in the field for many years. Senator King believed the States were being "debauched by Federal appropriations", that their "vitality and moral fiber" were weakened. Senator Frelinghuysen was disturbed by "the unfair system of

apportionment of the appropriations whereby the richer States helped to pay for work in the poorer States in the South and the far West". Senator Sherman considered the bill with its broad provisions for a great variety of disabled persons as "a misdirected measure of charity", and "a wave of maudlin sentiment", which he said, was "washing over this country", and would not subside until the income of the people had been impaired and sensibilities shocked "by the worthless element of humanity that abuses those sensibilities" (4:167-168).

The opposition in the House developed unexpectedly and was an outcome of weeks of propaganda directed not against the bill but aimed at the Federal Board for Vocational Education according to Representative Fess (4:167-168). He stated that the inability of the Board to meet the desires of certain people in the rehabilitation of soldiers and sailors was the core of the opposition. Patently however, the House opposition was based on the inadvisability of Federal aid during its extant financial condition and the evil influence of invasion of States rights. The magnitude of demand and desire for the service was also questioned. Several statements made in the acrimonious floor debates revealed misunderstandings of the purpose of the bill. Even so, the bill finally passed the House by a recorded vote of 196 to 105 (4:168-169).

Three features of the House and Senate bills

which were finally incorporated into a single bill were the occasion for much debate. The first of these was the classes of persons to whom the provisions should apply. This point of contention was finally decided by the use of the phrase "persons disabled in industry or in any legitimate occupation" and inclusion of a section in the bill which defined "persons disabled" to mean "any person who by reason of a physical defect or infirmity, whether congenital or acquired by accident, injury or disease, is, or may be expected to be, totally or partially incapacitated for remunerative occupation." (4:169-170).

Opinion was also sharply divided upon the necessity of financial need of the person to be rehabilitated. The matter was finally concluded through the expedient of omission, which implied that financial status would not be a prerequisite for eligibility for vocational rehabilitation assistance (4:170).

The second feature of the bill evoking debate was the type of appropriations. The original bills contemplated permanent appropriations but the matter was finally terminated in a compromise limiting appropriations to a four year period (4:170).

The third feature of the bill which achieved significant publicity was the amount appropriated for use by the Federal Board for Vocational Education. The original $200,000 yearly proposal was ultimately reduced

to $75,000 for this Board in instituting investigations and preparing reports and for expenses incurred in the administration of the act (4:170). With many compromises and modifications of the original bills the final provisions of the vocational rehabilitation act initiated for the fiscal year of 1921 were (4:171):

1. $796,000 for the States for the year beginning July 1, 1920.
2. $1,034,000 for each of the three succeeding fiscal years.
3. Appropriations apportioned to the States on the basis of their total population, with a maximum of $5,000 to each State.
4. Prior acceptance by each State of the provisions of the act and dollar-for-dollar State matching of Federal funds as prerequisites for Federal aid.
5. The designation of the board nominated in each State for the administration of the Smith-Hughes Act as the State cooperating agency.
6. Federal administration of the Act to be implemented by the Federal Board for Vocational Education.
7. Annual submission of State plans to the Federal Board for approval.

In addition to these explicit provisions, the Federal Board for Vocational Education interpreted the

Act to provide only vocational rehabilitation and placement but not maintenance, therapeutic treatment, physical restoration, nor occupational therapy (4:171).

During the year 1924 the act was amended and its provisions were extended until June 30, 1930, and yearly appropriations were increased to $1,034,000. In 1930 it was again amended and extended to July 1, 1933. The minimum State allotment was doubled and the yearly appropriations were increased to $1,097,000 to provide for this $10,000 minimum State allotment (4:171).

Representative William Bankhead of Alabama anticiapted the expiration of the act in 1933 and consequently introduced a bill in the House on the 8th of December, 1938 to prolong Federal aid for this purpose (4:172). His legislative introduction of more liberal provisions particularly for Federal aid to less fortunate States incited prolonged discussion. Numerous rather ingenious measures were attempted in an effort to destroy the program and the logic of the opposition was reminiscent of that in the previous decade. Representative John Cochrane of Missouri foresaw a darkly ominous future if the Federal government continued as "the wet nurse of all the citizens of this Republic" (4:174). Representative Francis Candon, of Rhode Island, proposed a subtle amendment which was superficially progressive. He advanced the proposal that Federal Aid to a State be suspended if it permitted the employment of children

under 16 years of age (4:174). When this action was ruled out of order, he then sponsored the uniquely ingenious idea of writing into the measure a provision investing the Supreme Court with authority to propound the constitutionality of the act on petitions of the governors of 13 States or more; but it, also, was consigned to oblivion (4:174).

The bill eventually passed in the House of Representatives and the Senate followed suit rapidly. As it was known to be in accord with the wishes of the President it became a law with his approval on June 30, 1932 (4:174).

The bill as passed upon the consummation of all amendments provided for the vocational rehabilitation of persons disabled in industry or otherwise. It applied only to persons over 14 or 16 years of age, depending upon the minimal employment ages within the States (4:174). Appropriations were once again authorized for a period of four years, ending in 1937 (5:8).

Pacing the evolution of this Federal legislation was the progressive State advancement in the passage of enabling legislation, the number of States with such legislation having grown from 12 to 45 in 1933; only Delaware, Kansas and Vermont remaining outside the pale (4:246). Kansas and Vermont subsequently provided for cooperation with the Federal Government in 1937.

The growing consciousness of a full

appreciation of the problem of vocational rehabilitation and the stake that society has in this national venture were concisely implied by John Aubel Kratz, Chief, Vocational Rehabilitation Division of the United States Office of Education. He stated that it should be emphasized, however, that as a condition of vocational rehabilitation State departments must often provide for mental, social and physical rehabilitation as well (4:247).

Parallel national legislation for the suitable placement of every citizen was initiated by the enactment of the Wagner-Peyser Act, which became effective July 1, 1933. A national system of employment offices operating through Federal-State cooperation very similar to that of the program of vocational rehabilitation was established. The act also stipulated that cooperative relations between the two agencies were mandatory (4:249).

With the advent of the Federal Emergency Relief Administration in 1933, the shortcomings of the national Vocational Rehabilitation Act were legislatively corrected on a minor scale. During the fall of 1933 this agency offered to the States a monthly stipend of $70,000 for services to the unemployed handicapped on relief or to those who were eligible for such relief. These funds were available for appliances, tuition, supplies, equipment, training travel and training

maintenance for the trainees. The use of these relief funds, which were administered equally by State emergency relief administrations and State supervisors of vocational rehabilitation, from July, 1934 to July, 1937, amounted to $1,563,234. These funds were discontinued in July, 1937 (5:8-9).

The provisions of the Vocational Rehabilitation Act amendments of 1943 of Public Law 113 which were passed by the 1st session of the 78th Congress were much more comprehensive in scope than their legislative precedents (40).

This legislative instrument permitted where advisable, feasible and permissable for the vocational rehabilitation of qualified eligibles the following services (40:15):

1. Corrective surgery or therapeutic treatment essential for the correction or substantial modification of a physical condition which was static and was construed a substantial handicap to employment, but was amenable to such treatment within a reasonable length of time.
2. Requisite hospitalization not to exceed 90 days relevant to surgery or treatment above.
3. Occupational licenses, customary occupational tools and equipment and transportation.
4. Prosthesis essential to securing and maintaining employment.

5. Maintenance not exceeding the estimated cost of maintenance during training, including back costs and other training material.

Review of Colorado legislation

In 1925 the Colorado State Legislature established a division for the vocational rehabilitation and placement of persons whose capacity to earn a livelihood was or had been destroyed or impaired. For the purposes of this act a physically disabled person was defined as one who, by reason of a physical defect or infirmity, whether congenital or acquired by accident, injury, or disease, was or could have expected to be, totally or partially incapacitated for remunerative occupation; the term "vocational rehabilitation" meant the rendering of a disabled person fit to engage in a remunerative occupation (14:185).

Furthermore, "to be eligible for rehabilitation a person must be vocationally handicapped, and must be susceptible of rehabilitation." (14:185).

The administrative State agency was declared the State Board (of Agriculture) and was later entitled the State Board for Vocational Education (14:185). To the discretion of this Board were delegated all administrative duties and all responsibility and authority for the execution of vocational rehabilitation, subject to periodic annual reviews by the Governor.

The State treasurer was designated custodian of all monies received by the state from appropriations made by the Congress of the United States for the vocational rehabilitation of eligible handicapped persons (14:186).

Administrative organization--Federal

The national agency originally designated for the administration and implementation of the Vocational Rehabilitation Act was the Federal Board for Vocational Education previously described which was later a component of the Federal Security Agency (5).

In addition to the previously described duties, it held regional conferences which were short-term in-service training schools for workers in the field and also national conferences for the promotion of the program of vocational rehabilitation. It also prepared annual reports to Congress concerning activities of the Board and insisted on certain minimal requirements for State personnel engaged in the profession of vocational rehabilitation (5:37).

In general, the Federal Board for Vocational Education functioned as an advisory and, in cases of gross State negligence or failure to comply with Congressional mandates regarding Federal grants to the States, as a regulatory body. It might also have been visualized as an exchange of informative experience center by the several States. In this sense it should

have been depicted as a statistical implement for the collection, analysis, synthesis and subsequent distribution of significant financial data and other objective information relevant to practicable vocational rehabilitation (5).

Administrative organization--
State of Colorado

The State act of 1925 created the State Board for Vocational Education which obligated the State Board, in addition to previously described duties to:

a. Disburse all funds provided for the rehabilitation of disabled persons.
b. Appoint and fix the compensations of the personnel necessary to administer this act.
c. Rehabilitate vocationally and place in remunerative occupations, persons eligible for the benefits of this act.
d. Make such rules and regulations as were necessary for the administration of this act.
e. Report annually to the Governor of the State on the administration of this act (14:167).

Scope of program--
Federal and State

From its inception, the vocational rehabilitation of civilians had expanded at a rate which was governed primarily by available funds until it subsequently encompassed eight regional offices

throughout the nation. Through the assistance offered to its eligible clientele in cooperation with the States concerned, approximately 30,000 disabled civilians were placed in suitable remunerative employment during the fiscal year 1946 (35).

A comparison of these figures for the first half of the fiscal year 1947 and the first half of the fiscal year 1946 was compiled as follows (35: table facing p. 4):

State	New cases during 1st half of fiscal year		Percent change	No. of cases in process of rehabilitation		Percent change	No. of disabled persons rehabilitated		Percent increase
	1947	1946		Dec. 31 1947	Dec. 31 1946		During 1st half of fiscal year 1947	During 1st half of fiscal year 1946	
Colorado	626	139	350.4	523	492	6.3	59	24	245

Cooperating agencies offering vocational rehabilitation to the disabled

The various county departments of public welfare in Colorado have exhibited humane and compassionate understanding through the wise use of public funds for maintenance and for other essential

expenditures incidental to the rehabilitation of the vocationally disadvantaged (5).

The Colorado State Employment Service, an affiliate of the United States Employment Service, which was previously discussed and which was originally created through the passage of the Wagner-Peyser Act, has been of inestimable value to the impaired as a placement agency. The selective placement of the handicapped principle of this Service was discussed under section D of this chapter (14).

Among the private humanitarian agencies and philanthropic institutions functioning in this sociological field, the sanatorium for the tuberculous was of cardinal importance (5).

The place of the community itself in the program was symbolized by an hypothecated ideal with practical foundations in the Baruch Committee on Physical Medicine in "A Report on a Community Rehabilitation Service and Center (Functional Plan)". The conceptions embodied in this excellent study are graphically depicted in the accompanying charts, #1, #2, and #3.

The Colorado Society for Crippled Children and Adults and the National Foundation for Infantile Paralysis have also been instrumental in certain phases of the rehabilitation of the orthopedically impaired (13). Other agencies are doing excellent work in this

field, but their activities are beyond the scope of this problem.

Pooled contributions of referral agencies

The cohesive nature of the vocational rehabilitation movement in the nation and the whole-hearted support from many agencies it received was revealed by the following referral sources of 142,666 new cases received by the vocational rehabilitation service throughout these United States for the fiscal year ending June 30, 1945 (42:8):

Government agencies	Per cent of total referrals	Insurance agencies	Per cent
Public officials	1.5	Insurance agencies	0.2
Selective Service	13.4	State Workman's Compensation Agencies	11.2
State Rehabilitation Agencies (Interstate referrals)	2.6	U.S. Employees' Compensation Commission	2.0
U.S. Employment Service	13.2		
Veteran's Administration	2.8	Health agencies	
War Shipping Administration	0.3		
Educational agencies		Crippled children's agencies	3.5
		Hospitals or clinics	2.8
		Marine hospitals	0.9
Business colleges	0.8	Physicians	1.4
Private schools	1.1	State mental hospitals	0.2
Public schools	7.4	Tuberculosis sanatoriums	2.4
State schools for the Handicapped	0.7	Other health agencies	2.4

Welfare agencies	Per cent of total referrals	Miscellaneous	Per cent
American Red Cross	1.2	Artificial limb companies	0.9
Private Welfare Agencies	0.9	Employers	1.1
Public Welfare Agencies	8.6	Labor unions	0.1
		News items, publicity, radio	1.8
		Self-referred	6.7
		Other individuals	6.1
		Other	1.8

Factors to be considered in direct and indirect placement in the field

The necessity for the individual consideration of each case as a unique problem was statistically depicted by the United States Vocational Rehabilitation Service for the fiscal year, 1929-30 (4:252-3):

Age distribution	Per cent
Under 21	31
21-30	36
31-40	17
41-50	10
Over 50	6
Origin of disability	
Employment accident	39
Public accident	18
Disease	37
Congenital	6
Nature of disability	
Hand	13.0
Hands	0.6
Arm	8.6
Arms	0.3
Leg	35.1
Legs	8.5
Hand and arms	0.5
Hand and leg	1.3
Arm and leg	2.0

Nature of disability	Per cent
Multiple	5.4
Vision	6.9
Hearing	3.5
General debility	3.1
Miscellaneous	11.2
Kind of rehabilitation service	
Institutional training	41
Employment training	8
Job restoration	51
Previous education	
Sixth grade and less	33
Seventh to ninth grades	42
Tenth to twelfth grades	19
Twelfth plus	5

The individuality of this problem was implied by Louise Neuschutz in her arbitrary classification of impairments for 1944:(26:21)

1. The Cardiac
2. The Orthopedically Handicapped
3. The Deaf and the Hard of Hearing
4. The Blind and the Partially Sighted
5. The Arrested Tuberculous
6. The Elderly and the Aged

Her quoted reference to Dr. Blauch also inferred this individuality with his statement that the disabled may be divided into three groups quite different from the above (26:preface):

(1) those who can compete in normal lines of work.

(2) those who can be employed under sheltered workshop conditions.

(3) those who are homebound, and, if employed at all, must work in their homes.

Vocational attitudes of the disabled

The hypothesis that introversion of the impaired is a commonplace was postulated in 1944 by Louise Neuschutz, who has personally experienced deafness (26:preface). She stated that the possession of a noticeable physical defect adversely affects the personality of the individual, irrespective of the nature of such a defect and that the possessor feels frustration and is inclined to timidity, self-consciousness, and hypersensitivity. His lack of self-assurance stemming from the attitude of much of society toward him was thought to induce and evoke fears of a darkly ominous future, of possession of frightening concepts of disease and bodily distortion with the onset of old age. These anxieties and apprehensions were considered powerful drives complicating the mental state of the handicapped. These baneful factors were presumed by psychologists to remove personality from control by conscious motivation and will (26:preface).

Her point of view may have been moulded by her self-confessed preoccupation with the home-bound and others who could not ordinarily have profited from normal vocational training and ensuing placement opportunities (26). Her findings were self-admittedly

conditional upon the degree of compensation achieved by each orthopedically disabled individual (34:28-36). She cited the example of Michael J. Dowling, who became President of the Olivia State Bank of Olivia, Michigan and who said (26:28), "There is no such thing as a cripple, if the mind is right." He spoke from the following personal experience (26:28-29).

On December 4, 1880, Michael was lost in a blizzard in the Minnesota woods. From seven o'clock that evening until the next morning he was out, unprotected in the bitter Siberian cold of 50 degrees below zero. When he somehow managed to reach the nearest farmhouse his hands were two frozen lumps of clay. The farmer's wife filled a tub of water into which he plunged both arms and legs to thaw them out. His hands and feet were so cold, however, that the water into which they had been dipped was frozen. About fourteen days later both hands had to be amputated at the wrists and the feet above the ankle joints.

He was the only child in the family and his mother passed away when he was ten. His father was an average carpenter and could do little to help Michael rebuild his life. The boy, however, helped himself by first of all becoming an avid reader and entered college later to prepare for the teaching profession. After entering the teaching profession he painted fences after school, sold books by subscription, ran a roller skating

rink and sold maps. He also started a newspaper and entered politics. His personal philosophy was as indicative of his powerful successful compensation as were his invariably triumphant ventures in profession and business (26:29):

> ...To marry is to take on trouble sometimes, but in my case I want to "fess up" that with the exception of some suffragette work Mrs. Dowling did, we have gotten along very well. We have lived very happily, and she never thought of artificial legs any more than I did. We had one son, whom we lost; but we have three daughters, all alive to grace the household...The trouble with most crippled men is that they think about those things which are gone and cannot be brought back. They keep their minds on what is gone, instead of diverting them to what they have left and making an effort to develop what is left.

Insofar as emotional maladjustments commonly associated with disabilities were concerned the visibility of orthopedic impairments endowed them with significance in social activities, vocational and non-vocational (26). Such significance justified a detailed discussion of the impairments construed to be orthopedic (26:29-30).

Neuschutz (26:29-30) stated that the Federal Board for Vocational Education listed the following classifications as orthopedic handicaps:

Fracture or injury of the joint, both compound and simple

Palsy (cerebral)

Effects of poliomyelitis

Injuries to the spine

Arthritis

Injuries of muscles, nerves, burns, etc.

Joint disease (acute monarticular)

Amputation (hand, arm, finger, foot, or leg)

Deformity or disability of shoulder, hip, hand, arm, leg, finger, back or foot

War caused facial disfigurement

The compensation for physical defects which was also exemplified by Monty Stratton as given by Neuschutz, (26) 1944, the famous White Sox pitcher, who lost a leg in an accident and learned to pitch again with an artificial leg, was studied in some detail by the late Dr. W. Berau Wolfe, an Adleran disciple. He listed four methods of compensation for physical defects:

1. Training the defective faculty or organ in which event the inferior organ may have functioned more efficiently than the normal one.
2. The function of another healthy organ may have been substituted for the inferior organ.
3. The situation in which the defective organ was located may have been developed until the organ was functionally advantageous.
4. The construction of a "psychic superstructure" of compensation. The extraordinary sensitivity of the defective organ was utilized in a manner

by the entire organism to have enabled translation into socially useful behavior (26:31).

Henry H. Kessler (Neuschutz, 1944), world-renowned authority on the problems of the disabled (26:34), felt that compensation was often the answer:

> Conversely, the organic defect may act as a stimulus to overcompensation, so as practically to eliminate the physical defect from consideration. The majority of us, according to Adler, are equipped with the materials but have not developed them fully. Yet with this imperfect development good performances are turned out, just as our ancestors produced great works with imperfect tools. It is probable that a man equipped with defective organs, i.e., with inadequate tools, will actually develop a more ingenious technique to combat the vigors of his environment. He will pay a great deal of attention to detail, devise more unerring short cuts and will undergo more intensive training. This accounts for the fact that the great and really worthwhile accomplishments have been achieved by individuals whose physical equipment was poor (26:34).

Rogerian psychotherapy as suggested solution for emotionally imbalanced

If the manner in which society regards those afflicted with noticeable impairments typically induces self-consciousness with associated frustrations and a rending of the personality symptomatic of emotional maladjustments (30) the Rogerian solution of catharsis seemed to offer a promising future for remedial counseling (30).

For the disabled who possessed a frustrated desire to enhance their prestige through identification with the impaired geniuses of recorded history or who have been unable to resolve their conflicts in a personally satisfying way, the release of emotional tensions through oral expression as advocated by Carl Rogers has often been successful (30).

Where, for example, the failure of the development of the Adleran "psychic superstructure" or other socially acceptable means of adequate emotional adjustment led to partial withdrawal from reality into the shadowy half-world of fantasy and dreams, the frank and unrestrained expression of personal problems frequently enabled one to gradually discard the yoke of repressed emotions (30).

Thus, through the opportunity for entirely free speech to a receptive but entirely non-directive counselor, the counselee literally "talks out" the solution of previously insoluble personal situations (30). Rogers consistently stressed the face-to-face situation in which the counselee experiences the absolute freedom of choice in reaching decisions. The interesting evolutionary process of the development of ability to solve the problems one encounters was delineated somewhat as follows (30).

The first faint tentative and rather timid expressions of the "introverted" or somehow emotionally

repressed are likely to be negative in character or reflections of the opinions of others forced upon the individual. The counselor listens attentively but without visible or audible expression which might in any way influence the counselee. Then as the unchallenged personal expression of the counselee slowly evokes from repression to apperceptive consciousness the full realization of the true state of affairs in which one is emotionally situated, the genesis of positive adjustment gradually becomes apparent.

In this manner many types of emotionally maladjusted persons to whom the technique was properly applied often found a path leading to mature insight and the ability to reach independently wise decisions of their problems with consequent happy endings.

Discriminatory attitudes of vocational associates and occupational supervisors

In 1946 the United States Employment Service delineated the prejudicial vocational problem faced by the physically handicapped in the formulation of a fundamental statement of policy (45:2-3). In this statement of policy this service found it necessary to define one with a marked orthopedic impairment as a handicapped applicant for employment, even where the disability obviously had no detrimental influence on the ability to do the work involved. The attitudes of employers and prospective fellow workers impelled the

Employment Service to such a definition despite its incompatibility with the principle of selective placement advocated by this agency (24). The example of the person with an impaired leg who might be limited in his walking, lifting, carrying and running capacity but who could work without favor in a job where he needed only the ability to see, to hear and to use his hands who would nevertheless be designated as handicapped was cited. It was the considered opinion of the agency that, on the average, the disabled individual must make many more applications to secure employment than does the physically normal person.

The evolution of these prejudicial social attitudes, it was thought, began in primitive times when the struggle for existence was a bitter physical contest. In this primordial period of the dim past everyone had to provide for his individual needs in their entirety and the welfare of the larger group did not permit the continued existence of the crippled and the aged as a burden on the community. As mankind gradually mastered his environment, conditions evocative of this attitude slowly receded into the past, but superstitions steeped in failure to understand the causes of abnormalities arose to plague the physically impaired. The orthopedically disabled consequently were thought to be possessed of the devil.

During the war, however, labor shortages

compelled employers to seek employees wherever they could be found. This compulsory tapping of the reservoir of skills among the handicapped often revealed to experienced production men an amazingly high quality of labor which presumably destroyed certain prejudicial attitudes of employers. Prejudices akin to superstition, however illogical, perish slowly and the Employment Service found that practical experience to the contrary was frequently not accepted by employers as evidence of ability to do the job by the disabled.

Tangible and palpable proof of these reactionary levels was bared by the insistence of many firms upon every job applicant passing a single standard medical examination prior to employment. The XYZ Company, for example, which had 235 different occupations, required every successful job seeker to take a single standard physical examination prior to employment. Everyone hired must have passed at least a 20/50 vision test with best correction. The Employment Service out of a vast accumulation of experience unequivocally stated, "Obviously, not everyone of the 235 jobs requires such visual acuity..." (45:27).

Another bar to the employment of the disabled was often expressed by managerial fear of "second injury" liability (45:29). Although it was true that in some States the employer could be held responsible for total permanent disability only partially resulting from the

vocationally incurred subsequent injury, managerial liability was not as factually serious as was supposed. Where employers, however, were convinced that those who had suffered one injury were more accident-prone than the able-bodied, the haunting thought that they would be financially responsible for the first as well as the "second injury" sustained by their employees was difficult to dispel.

Relevant to prospective fellow-employer and public relations the Employment Service encountered the following objections from employers (45:30):

Some employers felt that dissension might arise among the employees by virtue of discomfort, created among customers and employees by sight of the orthopedic impairment. Others felt that the vocational engagement of the visibly handicapped would make a firm seem to be a charity concern. Still others were convinced that special attention would need be devoted to the impaired and that such employees would expect special advantages and considerations from the employer. The fallacy of these conceptions was clarified by experience of the agency. In probing the factual basis for evidence, the quest for truth taught research workers that when the handicapped had a normal, well-adjusted attitude that most people became well adjusted to him. The tangible data of examples crystallized this experimental lesson into conviction by

the Employment Service which practiced as it preached (45:29-30).

Among the most able employer relations interviewers in the Employment Service was a man so stooped by spinal arthritis that he could not walk erect. The sales manager of a very successful department store in New York used a cane because of a limp and had no difficulty in handling the staff and customers. The need for special attention and demand for consideration and favors by the handicapped were found to be vocational rareties.

The paternal attitude occasionally expressed by the employer for the welfare of only those disabled in his plant was occasionally encountered. The answer of the agency was to remind the employer that applicants sent to him were so referred because they qualified for the job and not because they needed charity (1:29-30).

The employer who failed to hire the physically impaired through the plea of inability to meet insurance policy regulations was often rationalizing (1:29-30). Insofar as group life insurance was concerned the rates were based upon the age and sex of the people insured and upon no other considerations (45:29-30).

Factual basis of various attitudes imperilling suitable placement of the physically disabled

In addition to the authoritative nature of the refutations embodied in the Employment Service manual

"Selective Placement for the Handicapped", J. Dewey Dorsett, manager of the Casualty Department of the Association of Casualty and Surety Executive stated (Employment Service, 1946) (45:49): "There is nothing in any formula for the establishment of compensation insurance rates for such insurance that takes account of the age or the physical handicap of any employee."

The Employment Service interviewers emphasized to employers that insurance rates are initially determined on the basis of occupation and payroll and that readjustments are based on accident experience rate. They also stated that no evidence is available to indicate that the impaired are unnaturally accident-prone (45:49). On the contrary, experimental study has shown that the disabled workers are generally equal or superior to the normal worker in accident involvements (45).

The fears conjured by employers concerning "second injury" liability were factually allayed by the following relevances (45:48):

In some States compensation acts furnish money for artificial limbs and other prosthesis and placed responsibility for retraining in suitable occupations those workers who could not return to their previous occupation. Other States permitted handicapped workers to waive their right to compensation for injury received in subsequent accidents. Still other States

took into legal consideration the reduced earning power incurred by the original injury for the determination of awards for subsequent injury.

Certain other States bolstered "second injury" clauses with "second injury funds". Under this provision the employer paid only for the second injury, but the worker obtained full compensation for combined injuries (the difference came from a special fund) irrespective of the origin of the original injury.

Legal evidence safeguarding employers of handicapped

Insofar as Colorado was concerned, the "Workman's Compensation Act of Colorado and Colorado Occupational Disability Act" (1945) which was administered by the Industrial Commission of Colorado, provided safeguards for the employer of the disabled in the event of "second injury" (12). The employer was protected against ruinous claims for total permanent injury where the "second injury" was only a contributory cause under the following conditions:

1. The Act did not apply to employers of private domestic servants or farm and ranch labor, nor to employers hiring less than four employees (12:7).
2. Employee was defined in the Act to exclude employees for whom employment was only casual and not in the ordinary course of business,

trade, profession or occupation of the employer (12:7).

3. The provisions of the Act did not apply to common carriers by railroad or other common carriers for whom a rule of liability has been, or may be established by the laws of the United States (12:7).
4. In the determination of compensation to be awarded in case of "second injury" the injured employee, or in case of death, his heirs or assignees, his average weekly earnings was determined to be such sum as would reasonably represent his weekly average earning capacity at the time of the subsequent injury (12:20).
5. When the subsequent injury and the original injury did prima facie constitute complete permanent disability, the party liable for the "second injury" was held only for the compensation payable for the subsequent impairment. The remainder of the sum necessary to provide for total, complete disability came from a special fund known as "Subsequent Injury Fund" (12:30).

Contemplated and applied measures relevant to suitable placement of the impaired

The United States Employment Service has

predicated the Selective Placement Plan for the handicapped upon the hypothesis that the impaired do not constitute a distinct segment of our population but that they as a heterogeneous group have the virtues and faults, ambitions, qualities and failings common to those United States as a human entity. The fundamental concept of individual differences among the physically disadvantaged comparable to those of the able-bodied and inherent also in physical requisites and working conditions of industry, agriculture and other vocations led to the following characteristics of the Plan (45):

> 1. Know the applicant.
> 2. Know the job.
> 3. Place on the basis of qualifications first as he (the interviewer) did for the non-handicapped applicant.(45:5).

Through these common sense rules, the Employment Service has developed "The Physical Demands Approach" which is an amplification of the application of the job analysis technique. Job analysis technique, in turn, is generally conceded to be one of the very best techniques or tools for developing specific occupational information needed by placement interviewers. The job summary reveals what the worker does, how and why he does it and what skills, knowledge and abilities are involved (44:5).

Worker analysis includes the utilization of aptitude tests, and trade questions, and related tools for the development of information concerning applicants.

The placement process is the process of matching job and worker through the use of such tools (1:5-6).

Physical demands analysis is merely that part of job analysis describing environmental factors and the physical activities of jobs. Physical capacities appraisal is that part of workers analysis which evaluated the physical activities a particular person is capable of performing and the working conditions to which he might be safely exposed. Matching the physical capacity of the worker to the physical demands of the job for which he met experience, training and other requirements constituted a major aspect of Selective Placement.

It could thus be seen that the physical demands approach stressed the analysis of activity and working condition factors of jobs in addition to the emotional and physical individual capacity. The ordinary and commonplace conceptions of skills, interests and aptitudes are not divorced from the other factors, however, and each and every one has to be considered. Physical demands factors naturally vary in importance from job to job.

In compliance with the logical policy of considering the qualifications of the worker as an individual first and the job requirements secondly and the ensuing procedure of matching, the vocational instrument of physical capacities appraisal of the

Employment Service will first be discussed in meticulous detail.

Physical capacities appraisal.--The composite nature of the employment qualification of an individual was symbolized as follows in Figure 1 (45:6).

Figure 1.--SYMBOLIC COMPOSITION OF EMPLOYMENT QUALIFICATIONS OF AN INDIVIDUAL.

Manifestly all sectors were not of equal importance or strength in every individual, and not all jobs required that all segments be used.

The "physical demands approach" was positive in nature in that it emphasized what an individual has left rather than what he had lost (45:6). It also stressed the individual nature of each impaired individual and his ability. The fact that two individuals with similar physical disabilities may have made entirely different adjustments to the disabilities destroyed the value of

generalizations (45:6).

This approach to the vocational problem was utilized in a wide variety of circumstances (45:7) among which the following were particularly significant (1:7).

a. Placement and transfer.--follow-up of placement with accompanying adjustments where necessary.

b. Counselling and training (pre-vocational training advice).

c. Supervision and adjustment.--follow-up possibly entailing a redesign of the job.

d. Evaluation.--a definitive basis for appraisal of the impaired in a specific vocational situation.

The common terminology in the interpretation of the translation of physical job requirements and the physical capacities of the applicant into physical activities and working conditions offers a convenient, non-technical medium of communication for physicians, employers, prospective rehabilitants and other interested parties (45:7).

The personal nature of the physical capacity report from the physician is treated as confidentially as is possibly commensurate with proper placement. Only data relevant to the physical demands of the job are used in correspondence to employers (45:7).

In addition to the usual personal data collected for the normal worker relevant to education, training,

age, marital status, etc. physical handicaps were ingeniously classified and coded as follows for convenience and uniformity in placing handicapped by the Employment Service (45:10-12).

Arm, hand, finger

*01. Arm amputation, absence congenital, or impairment of functions of one arm (either at, below, or above the elbow).

*02. Both arms, congenital absence, amputation, or impaired functions.

*03. Finger disabilities; congenital absence, amputation, or disablement of one thumb and/or three or four of the remaining fingers.

04. Finger disabilities; congenital absence, amputation or disablement of one or more but less than three fingers or parts thereof.

Eye

*10. Total blindness in one of the eyes. Vision normal with or without correction in the other eye.

*11. Defective vision (20/70 up to, but excluding 20/200 in the better eye (corrected); vision normal with correction from 20/200 maximum).

*12. Blind as determined by the State vocational rehabilitation agency serving the blind (not served by the vocational rehabilitation agency in Colorado).

-13. Eye conditions other than usual acuity (eye disease).

Hearing

*20. Hard of hearing (some loss of hearing).

*21. Deaf (loss prior to speech learning).

*22. Deafened (complete loss after speech was learned).

Heart and blood

*30. Heart disease.

*31. Arteriosclerosis (associated high blood pressure).

33. Varicose veins.

34. Other circulatory impairments such as phlebitis.

35. Lukemia, hemophelia, venereal diseases and miscellaneous blood diseases.

Leg, foot

*40. Congenital absence or amputation of leg at or above knee fitted with artificial leg.

*41. Congenital absence or amputation of leg below knee and fitted with suitable prosthesis.

*42. Impaired legs without crutches.

*43. Amputations or leg disabilities with crutches used.

44. Disablement of any part of one leg.

*45. Amputations without crutches or artificial leg.

46. Toe amputations or any part of foot below ankle, with artificial replacement.

47. Flat feet or fallen arches.

48. Leg and arm disabilities.

Respiratory

*50. Tuberculosis, pulmonary.

*51. Silicosis.

*52. Asthma.

53. Other.

Speech

60. Defective speech, spastics excepted.

Spinal impairments

*70. Curvature of the spine or other spinal deformity.

71. Non-deforming back or spine injury or disease.

Miscellaneous

*79. Cerebral palsy (athetosis, spasticity, Parkinson's disease).

*80. Malaria.

81. Stomach ulcers, diabetes, cancer, and other internal disorders including kidney diseases.

82. Hernia.

83. Skin diseases.

86. Facial disfigurement.

87. Glandular disturbances including midgets, etc.

91. Neuritis, multiple sclerosis, post-encephalitis, etc.

The starred items were disabilities ordinarily considered handicaps. The remaining items could have been handicaps if they (45:12):

a. Necessitated modification or change in occupation of applicant.

b. Curtailed difficulty in securing employer acceptance for suitable employment.

c. Necessitated special consideration to deter the client from accepting a job which probably would:

   (1) impel him to imperil the health or safety of others.

   (2) render more serious his disability.

d. Vocationally restricted the opportunities of an entry into trade, industry or profession.

e. Necessitated referral to cooperating agency for restorative or other adjustment services.

Insofar as <u>emotional imbalances</u> were concerned, only applicants with medical reports or known evidence were considered (1:86). Relevant to this vocational impairment, this agency (see above) was more interested in working conditions than with physical activities unless there was resultant physical distress. Caution

was exercised in the evaluation of hospital reports which were predicated upon possibly incomplete description, contrasting conditions in the hospital and out, and possible intervening changes during the interim between hospital discharge and the time of interview (45:87).

These clients were classified in accordance with the Michigan Industrial Mental Health Council grouping (4:88-90).

1. Psychotic--Schizophrenia and manic-depressive psychosis, unrealistic relation to surroundings--minor disorder conversion hysteria, compulsive-obsessive neurosis.
2. Psychoneurotic--anxiety neurosis, neurasthenia.
3. Chronically maladjusted.
4. Normal.

The United States Employment Service (1946) has embodied the concepts developed by the White House Conference in its approach to the placement problem of the mentally impaired (45:84-86).

With these idealogical tenets as an underlying principle the following developments were consummated in the placement program:

1. Those who learned to read and write in a limited capacity under special instruction but who received little advantage beyond the ordinary subjects above the fourth or fifth grade.

2. Those who learned to do comparatively simple, unskilled occupational or industrial tasks with occasional errors, and were capable of earning a living under proper supervision but were incapable of advancing beyond the common labor level in simple industrial or trade pursuits.
3. Those dependent on outside help for successful adjustments to changing vocational conditions despite some ability to acquire advantageous social habits.

Physical characteristics were added to the educational, economic and social attributes designated by the Conference. The mythical virtue of immense strength commonly associated with mental impairments by the uninformed was contrary to statistics. Among the mentally retarded physical disabilities were twice as likely to be found as among the mentally normal.

The fact that some of the mentally subnormal were capable of displaying initiative was stressed as well as the normally distributive nature of variations in mental abilities.

The increased probable incidence of emotional imbalance among this type of the handicapped was also emphasized with remedial suggestions offered. Among the latter were the futility of expecting performance beyond the mental power of the applicant and admonition against ridicule of limited development as a primary cause of

emotional instability. In contrast to sensitivity to ridicule the interviewer sought in the interviewee the positive drive for independence.

Confused impressions possibly due to other factors were often encountered. Poor hearing easily influenced the employer to disparage the mentality of the applicant. Objective data used by the Employment Service in placement were:

1. Attendance in school (type of ungraded class).
2. Mental institution record or police record.
3. Incoherence or lack of attention during interview in association with (1) or (2).

Here again, the individuality of each case was stressed and in the event that the applicant had received adequate training for a particular job he was not considered handicapped.

Another once popular fallacy discarded was the assumption that the retarded could perform only repetitive tasks. It was discovered that, once learned, a variety of simple tasks might prove more suitable for some.

The principle of learning by demonstration in preference to oral instructions and written directions and the deceptive impressions received from occasional glib-tongued though retarded applicants were delineated by this agency.

Several job area possibilities frequently

found suitable for the retarded were suggested: food preparation and serving, personal service (cleaning and pressing, domestic service, barber shop, beauty parlor) building maintenance and domestic service.

Detailed practicable approaches to the placement problem were indicated by the following rather replete sections on physical demands analysis, and the matching of physical capacities with physical demands.

Physical demands analysis.--The physical demands analyses of the Employment Service were predicated upon the hypotheses that (45:95):

"A position is made up of a group of tasks requiring the full-time services of one individual", and that "a job is made up of a group of positions which are identical with respect to their major tasks."

> When analyzing the skill requirements of jobs in a plant, the analyst usually prepares only one job analysis schedule for each job analyzed. This is done because the skill requirements of a job remain relatively constant throughout the plant. In physical demands analysis work, however, it may be necessary to prepare several physical demands analysis forms on one job. This is necessary because the physical and environmental requirements of a job may vary widely in different departments in the plant. Conversely, the information on one physical demands analysis form may serve to cover several jobs when the physical and environmental requirements on the jobs are basically the same (45:95).

The four categories of information necessary in a complete analysis were previously described: what the worker did; how he did it; why he did it; and the

skill involved. But in physical demands analysis the emphasis was placed upon what the worker did and how he did it, and the other two factors were involved only on a few rare occasions when necessary to clarify the physical activities and working conditions (47:95).

Preconceived notions were discarded in preparing the job analysis and the stress was placed upon the job as it existed in one particular place (45:95-96).

A keenly analytical point of view was essential in sharply distinguishing the physical activities required in the job from the physical activities which might be performed by a particular worker. The example presented of a worker jumping from a platform rather than using nearby steps--the worker did jump but the activity was not a requirement of the job. This example illustrates the point as does the case of the worker who stood rather than use the seat provided since standing was not an essential for the job. Another enlightening illustration was the arc welder who used his auditory sense to hear the sibilant sound of the arc but the job did not require hearing since a deaf man could have seen whether he was maintaining the proper arc (1:96).

The emergency nature of a job which was not necessary for the job itself such as repair work which should be done by a regular repairman was not to be

confused with the essential duties of the job (45:96).

The full range of the physical activities had to be covered by the analyst but since certain essential vocational tasks of the job studied might need only be performed once in every several days the analyst could not devote the necessary time to observe personally such tasks. Therefore, he had to rely partially upon questioning workers and employers to get the complete picture (45:96).

Since this was inescapably so, the question of which data were to be gathered by interview and which by observation assumed vital importance. The decision naturally depended somewhat upon circumstances but the following suggestions were empirically advocated for the subject matter of observation (45:96).

1. The interrelationship of the various physical activities.
2. The time interval for each physical activity or time each employee was subject to each working condition.
3. The number of times that the worker was engaged in each physical activity and subject to each working condition during a given period, a workday or an hour.
4. The intensity factor, distance walked, weight lifted, height climbed, directions reached, temperature, height of working place, etc.

This information was verified for accuracy by questioning supervisors or workers, and in addition, placement officials attempted to secure the following data (47:96):

1. Other duties not observed by analyst.
2. Mass of weightiest object lifted.
3. Additional tools and equipment used by worker.
4. Difference in the way job is handled on other shifts.

An indication of the data and meticulous manner in which the Employment Service gathered data for physical demands analysis was revealed by the following relevant information (45:97-106) which was secured directly from one of the forms used by the agency:

UNITED STATES EMPLOYMENT SERVICE PHYSICAL DEMANDS FORM
(Replicated ES-130 Form (3-44))

Job title_____Occupational Code_____

Dictionary title_____

Industry_____Industrial Code_____

Branch_____Department_____Date_____

Physical Activities			Working Conditions		
..1. Walking	..16. Throwing	..51. Inside	..66. Mechanical		
..2. Jumping	..17. Pushing	..52. Outside	hazards		
..3. Running	..18. Pulling	..53. Hot	..67. Moving		
..4. Balancing	..19. Handling	..54. Cold	objects		
..5. Climbing	..20. Finger-	..55. Sudden	..68. Cramped		
..6. Crawling	ing	temp.	quarters		
..7. Standing	..21. Feeling	changes	..69. High		
..8. Turning	..22. Talking	..56. Humid	places		

(continued)

Physical Activities			Working Conditions		
.. 9. Stooping	..23. Hearing		..57. Dry	..70. Exposure to burns	
..10. Crouching	..24. Seeing		..58. Wet		
..11. Kneeling	..25. Color vision		..59. Dusty	..71. Electrical hazards	
..12. Sitting			..60. Dirty		
..13. Reaching	..26. Depth perception		..61. Odors		
..14. Lifting			..62. Noisy	..72. Explosives	
..15. Carrying			..63. Adequate lighting	..73. Radiant energy	
	..27. Working speed			..74.	
	..28.			conditions	
	..29.		..64. Adequate ventilation	..75. Working with others	
	..30.				
			..65. Vibration	..76. Working around others	
				..77. Working alone	
				..78.	
				..79.	
				..80.	

Details of physical activities:

Details of working conditions:

Details of hazards:

Figure 1.--UNITED STATES EMPLOYMENT SERVICE PHYSICAL DEMANDS FORM. (Form used by the United States Employment Service in selective placement of the physically handicapped.)

Relevant to the compiling of these recorded data were the following instructions (45:97):

1. Job title.--Common designation by which the job was known in the establishment in which it was analyzed. In the interests of uniformity the title was invariably the same as the title used

for every job analysis prepared for the job.

2. Occupational Code.--The 5-digit or 6-digit code number for the Dictionary of Occupational Titles job when the job was defined there. Otherwise no code number.
3. Dictionary Title.--The job name assigned in the Dictionary of Occupational Titles when so defined, otherwise no code number.
4. Industry.--The industry in which the job was being analyzed.
5. Industrial Code.--The 4-digit code number specified by the Social Security Board in the Industrial Classification Code.
6. Branch.--The industrial branch in which the job was being analyzed.
7. Department.--The department of the plant in which the job was located.
8. Date.--The date analysis was made.

In the section in which the physical demands were tabulated, 27 of the most common were specified, several of which were clarified of possible interpretative confusion by the following definitions (45:125):

Stooping--bending the body downward and forward by bending the spine at the waist.

Crouching--bending the body downward and forward by bending legs and spine.

Handling--seizing, holding, grasping, turning, or otherwise working with the hand or hands.

Fingering--picking, pinching or otherwise working with the fingers primarily, rather than with the whole hand or arm.

Physical activity, numbers 28, 29, and 30, were provided (45:98) for those rare and uncommon activities not ordinarily encountered. An "X" was placed before each activity required by the job and an "O" was placed before each activity not required by the job.

In the order in which these "details" appeared on the form above were detailed the following instructions (45:98-101):

(a) Details of physical activity.

The degree of physical activity was specified by denoting time or frequency and intensity and to describe the interrelationships of the varied physical activities required by the job. Physical requirements were emphasized and to assure relevant objectivity and proper placement attitude by the analyst the section invariably began with "This worker".

The appropriate time consumed by every activity was preferably expressed as the number of minutes or hours in which the activity occurred during the working day. Or it could be recorded as the number of times per hour or per working day the activity

occurred. The example given (47:98) "lifts and carries up to 25 pounds as far as 75 feet three times daily". Two other much less desirable methods which were used only as a last resort were the percentage of the working day and the usage of such adverbs as constantly, frequently, occasionally, alternately, intermittently, etc.

The intensity factor was described by example (45:99):

1. "Crouches and reaches down to grasp, lift and carry 25-pound metal parts up to 25 feet."

2. "Reaches forward, grasps, handles, and fingers value parts and micrometers during inspection operations."

3. "Stands and reaches above shoulder height to grasp and pull electric wires horizontally through conduit," or "Stands and reaches forward to grasp and pull electric wires horizontally through conduit by bracing one foot against wall."

The lack of standardized terms of force in pounds in pushing and pulling from old body positions precluded the defining of factors in pounds of force. In the first of example number three, for example, the worker could have exerted perhaps 20 pounds force while in the record case 150 pounds could be exerted.

Insofar as standing, stooping, crouching, kneeling, turning and sitting were concerned the time

factors automatically explained intensity by having stated, "Stands and stoops over work bench (4 hours)."

In reaching, the body position required and the direction reached were essential to a proper analysis.

Where talking other than that necessary for ordinary conversation is a requisite, the quality of voice required, enunciation and other vocal qualities were necessary for a particular job, these vocational qualities were indicated. Where hearing was necessary the most difficult sounds to be heard were noted. Visual requirements included the most difficult object to be seen.

In the event that the physical activities involved specific use of a particular limb such a necessity was noted.

Interrelationships of activities were also to be noted when such activities are interdependent as was revealed by the example (45:100):

> Stands, stoops, and turns while operating machine (7 hours); occasionally walks about 10 feet lifting and carrying chucks and materials not over 30 pounds; pushes hand truck to transport loads up to 300 pounds about 75 feet four times daily; using both hands, manipulates lathe control hand wheels to set controls to fine (1/24 inch) etched gradations (3 hours); visually, and by fingering and feeling examines finishes on machine parts; stoops to read vernier and other fine etched gradations (2 hours); orally instructs learner (1 hour).

b. Details of working conditions.

This section was written in a manner similar to that under 'a) above.

c. Details of hazards.

The crux of this section was to emphasize the injurious possibilities to workers on the jobs. Where a question of whether job hazard actually existed, workers' opinions and foremens' opinions were sought. Among the less frequently conceived causes of injury were (45:101):

Toxic conditions may have resulted from the "possibility of metal fume fever from galvanized iron welding fumes" and, "Possibility of respiratory, digestive, and skin irritations from liquids, vapors, and odors from zinc chromate primer, paint, and thinner (reduced by respirator, protective cold cream, and cloth masks)" and, "possibility of injury to hearing faculties from constant resulting noises."

Analagously developed were the following commensurate measures for physical capacities appraisal which was briefly discussed above (45:108-115).

Under physical activities were listed those activities to be avoided by the applicant and it was considered imperative that the physician be familiar with the definitions of these activities. Relevant to the two alternatives for these items on the Physical Demands Form (see p. 82) three possibilities rather than two alternatives were available. The space preceding

Form ES-160 (Rev. 2-45)

Budget Bureau No. 11-R068.1. Approval expires February 28, 1946.

WAR MANPOWER COMMISSION

BUREAU OF MANPOWER UTILIZATION

PHYSICAL CAPACITIES FORM

Name Bill Jones Sex M Age 29 Height 72 Weight 190

	PHYSICAL ACTIVITIES			WORKING CONDITIONS	
	1 Walking		16 Throwing	51 Inside	66 Mechanical Hazards
O	2 Jumping	√	17 Pushing	52 Outside	67 Moving Objects
O	3 Running	√	18 Pulling	53 Hot	O 68 Cramped Quarters
	4 Balancing		19 Handling	54 Cold	69 High Places
	5 Climbing		20 Fingering	55 Sudden Temp. Changes	70 Exposure to Burns
O	6 Crawling		21 Feeling	56 Humid	71 Electrical Hazards
	7 Standing		22 Talking	57 Dry	72 Explosives
	8 Turning		23 Hearing	58 Wet	73 Radiant Energy
	9 Stooping		24 Seeing	59 Dusty	74 Toxic Conditions
	10 Crouching		25 Color Vision	60 Dirty	75 Working With Others
	11 Kneeling		26 Depth Perception	61 Odors	76 Working Around Others
	12 Sitting		27 Working Speed	62 Noisy	77 Working Alone
	13 Reaching		28	63 Adequate Lighting	78
√	14 Lifting		29	64 Adequate Ventilation	79
√	15 Carrying		30	√ 65 Vibration	80

Blank Space = Full Capacity; √ = Partial Capacity; O = No Capacity

May work _____ hours per day _____ days per week. (If TB, cardiac or other disability requiring limited working hours).

May lift or carry up to 25 pounds.

Details of limitations for specific physical activities Effort in pushing and pulling should not exceed effort in lifting and carrying.

Details of limitations for specific working conditions Should avoid frequent or constant vibrations.

Date October 2, 1944 Physician R. C. Black, M. D.

Figure 2 (45:117)

the number was left blank for which the worker has full capacity. A "√" was placed in the space for which the worker had a partial capacity and a "0" in all spaces for which the worker had no capacity (1:109). Explanatory remarks were necessary for all checked items. Essentially the same procedure was followed for all items listed under "Working Conditions" (45:109).

In those items in which the physician was convinced that the worker had partial capacity he was strongly urged to keep the following points in mind (45:109-110):

> 1. May work ___ hours per day ___ days per week. To be filled in only when there is a definite restriction on the number of hours which a worker such as a T.B. or Cardiac may work.
>
> 2. May lift or carry up to ____ pounds. When either lifting or carrying or both have been √ed, the physician should indicate the maximum number of pounds the worker should lift or carry. It is (45:109) (start p. 110) impossible, at the present time, to determine exactly the maximum number of pounds which a restricted worker may lift or carry; however, it is obvious that the physician is the best qualified person to make such an estimate.
>
> 3. Details of limitations for specific physical activities. The following examples may serve as a guide for making notations concerning specific limitations.
>
> Walking. 'Should not walk up steep incline unless allowed to take his time.' 'Should not be required to walk more than 10 or 15 feet at a time.' 'May walk up to 2 or 3 miles per day.'
>
> Climbing. 'Should not climb more than 10 or 12 feet unless allowed to take his time.' 'May climb when steps or rungs are not more than 6 inches apart.'

Crawling. 'May crawl occasionally during day.'

Standing. 'Should alternately stand and sit every fifteen minutes.' 'May stand if short rest is possible once an hour.' 'Must lean against bench or similar object while standing...' (45:110)

Crouching. 'May crouch if allowed to stand up when desired.'

Kneeling. 'May kneel if allowed to stand up when desired.'

Sitting. 'May sit on chair with back.'

Reaching. 'May reach in all directions with left arm only.' 'May not reach under shoulder with right arm.'

Pushing and pulling. 'Capacity to pull equivalent to capacity to lift.'

Handling. 'Should not handle objects over 5 pounds.' 'Should avoid constant handling.'

Fingering. 'Restricted to right hand.' 'May finger extensively if rest periods may be taken when desired.'

Feeling. 'Feeling with left hand only.'

Talking. 'Unable to talk louder than normal volume.'

Hearing. 'May work where safety does not depend on auditory warnings.' 'Able to hear human voice when raised only.'

Seeing. 'Field of vision limited to right side.'

Color Vision. 'Red-green color blind.'

4. Details of limitations for specific working conditions.

Hot-cold. 'Should work in temperatures over 100° F for short periods only.' 'May not work where temperature is below 40° F.'

Sudden Temperature Changes. 'Should not be subject to sudden temperature changes more than once or twice a day.'

Humid. 'Can't stand high humidity when temperature is over 90° F.'

Wet. 'Must not stand on wet floors.'

Dusty. 'Should avoid organic dusts.'

Noisy. 'Should not work near hammering or other loud noises.'

Adequate Lighting and Ventilation. When it is imperative for the worker to have adequate lighting, or adequate ventilation, it is important to make a comment to that effect under Details of limitations for specific working conditions since no check will appear

> in the check list portion of that form. Some examples are: 'Should never work in dim surroundings,' and 'Absolute minimum of glare required.'
>
> Vibration. 'May work around occasional but not constant vibration.'

Matching physical capacities with physical appraisal.--The Employment Service described by the following examples the manner in which the physical characteristics of workers and jobs resulted in suitable placements for the vocationally handicapped (45:116-124):

> In the first example the physical capacities form on page 25 (see Figure 2) shows that Bill Jones, who formerly worked in a sheet metal shop, no longer possesses the physical capacities to work at the same place. As indicated in the physical demands form shown on page 26 (see Figure 2) his former job of Sheet Metal Fabricator requires, among other things, that he lift and carry up to 150 pounds of materials as well as to push and pull these materials to position them. His physical capacities form indicates that he can lift up to 25 pounds only and that he should not exert more than the equivalent effort in pushing and pulling. An opening exists for the job of Ventilation-Duct Installer in a nearby shipyard and it can be quickly found by examining the physical demands form on page 27 (see Figure 3) that this job requires that only 25 pounds be lifted, carried, pushed, and pulled. Moreover, this job does not require any of the other activities for which Bill Jones has limitations. Therefore, as far as Bill's physical capacities are concerned, he can be safely placed on the job of Ventilation-Duct Installer.

Other studies.--The Association of Casualty and Surety Executives in the year 1945 published a pamphlet entitled, "The Physically Impaired a Guidebook to their Employment" which was distributed in cooperation with the Division of Vocational Rehabilitation of the Colorado State Board for Vocational Education (1).

Form BS-126
3-40

WAR MANPOWER COMMISSION
BUREAU OF MANPOWER UTILIZATION

Budget Bureau No. 11-R098.1
Approval expires February 28, 1945.

PHYSICAL DEMANDS FORM

Job title Ventilation-Duct Installer Occupational code 4-85.622

Dictionary title SHEET-METAL WORKER III

Industry Ship and Boat Building and Repair Industrial code 3431

Branch Construction Department Outfitting Dock Date 10-1-44

PHYSICAL ACTIVITIES		WORKING CONDITIONS	
X 1. Walking.	O 16. Throwing.	X 51. Inside.	X 66. Mechanical hazards.
O 2. Jumping.	X 17. Pushing.	X 52. Outside.	X 67. Moving objects.
O 3. Running.	X 18. Pulling.	O 53. Hot.	O 68. Cramped quarters.
O 4. Balancing.	X 19. Handling.	O 54. Cold.	X 69. High places.
X 5. Climbing.	X 20. Fingering.	O 55. Sudden temp. changes.	X 70. Exposure to burns.
O 6. Crawling.	O 21. Feeling.	O 56. Humid.	O 71. Electrical hazards.
X 7. Standing.	O 22. Talking.	O 57. Dry.	O 72. Explosives.
X 8. Turning.	O 23. Hearing.	O 58. Wet.	O 73. Radiant energy.
X 9. Stooping.	X 24. Seeing.	O 59. Dusty.	X 74. Toxic conditions.
X 10. Crouching.	O 25. Color vision.	O 60. Dirty.	O 75. Working with others.
X 11. Kneeling.	O 26. Depth perception.	X 61. Odors.	X 76. Working around others.
X 12. Sitting.	O 27. Working speed.	X 62. Noisy.	O 77. Working alone.
X 13. Reaching.	28.	X 63. Adequate lighting.	78.
X 14. Lifting.	29.	X 64. Adequate ventilation.	79.
X 15. Carrying.	30.	O 65. Vibration.	80.

16-83520-1 U. S. GOVERNMENT PRINTING OFFICE

Details of physical activities: Climbs about 50 feet up and down hull ramps and stairs about 6 times daily, half the time carrying tools and materials weighing up to 20 pounds. Stands, stoops, crouches, kneels, sits, and turns while handling and fingering felt strippings, hand tools, small nuts, bolts, and soldering iron to solder and assemble vents and flanges (7 hours). Lifts materials up to 25 pounds and carries up to 50 feet several times daily. Reaches for, grasps, pushes, and pulls vents and other parts weighing up to 25 pounds to place in position and pushes and pulls 8-pound drill frequently. Observes ruler graduations of 1/16-inch.

Details of working conditions: Works inside hulls (95%), outside in all weather (5%), and on staging up to 10 feet high (20%). Exposed to nearby chipping and hammering noises.

Details of hazards: Possibility of injury from falling as far as 10 feet down stairs, of respiratory, digestive and skin irritations from vapors and odors of paint and zinc chromate primer, of being struck and injured by materials carried or accidentally dropped by other workers, of cuts from sharp edges of sheet metal (reduced by gloves), and of impairment of hearing from nearby chipping and hammering noises.

After Bob Smith was injured he could no longer work at his old job of Chipper in the Outfitting Department. As indicated in the physical demands form on page 121, this job requires, among other things, that he must stand for 7 hours as well as do considerable climbing. His physical capacities appraisal form on page 120 indicates that he should not run or jump, that he should avoid prolonged walking and standing, that he may climb short distances occasionally, and that he should not engage in strendous pushing and pulling activities which involve the legs. By examining the physical demands form on pare 122 for the job of Chipper in the Plate Shop, it is found that this job requires a small amount of

Figure 3 (45:119)

Form ES-130
(3-44)

WAR MANPOWER COMMISSION
BUREAU OF MANPOWER UTILIZATION

Budget Bureau No. 11-R068.3.
Approval expires February 28, 1946.

PHYSICAL DEMANDS FORM

Job title Sheet Metal Fabricator Occupational code 4-80.010

Dictionary title SHEET METAL WORKER II

Industry Sheet Metal Industrial code

Branch Department Date 10-2-44

PHYSICAL ACTIVITIES				WORKING CONDITIONS			
X	1. Walking.	O	16. Throwing.	X	51. Inside.	X	66. Mechanical hazards.
O	2. Jumping.	X	17. Pushing.	O	52. Outside.	O	67. Moving objects.
O	3. Running.	X	18. Pulling.	O	53. Hot.	O	68. Cramped quarters.
O	4. Balancing.	X	19. Handling.	O	54. Cold.	O	69. High places.
O	5. Climbing.	X	20. Fingering.	O	55. Sudden temp. changes.	X	70. Exposure to burns.
O	6. Crawling.	O	21. Feeling.	O	56. Humid.	O	71. Electrical hazards.
X	7. Standing.	O	22. Talking.	O	57. Dry.	O	72. Explosives.
X	8. Turning.	O	23. Hearing.	O	58. Wet.	O	73. Radiant energy.
X	9. Stooping.	X	24. Seeing.	O	59. Dusty.	O	74. Toxic conditions.
O	10. Crouching.	O	25. Color vision.	O	60. Dirty.	O	75. Working with others.
O	11. Kneeling.	O	26. Depth perception	O	61. Odors.	X	76. Working around others.
O	12. Sitting.	O	27. Working speed.	X	62. Noisy.	O	77. Working alone.
X	13. Reaching.		28.	X	63. Adequate lighting.		78.
X	14. Lifting.		29.	X	64. Adequate ventilation.		79.
X	15. Carrying.		30.	O	65. Vibration.		80.

16—32564-1 U. S. GOVERNMENT PRINTING OFFICE

Details of physical activities: Stands, stoops, turns, and walks about benches and machines during job processes. Reaches for, grasps, lifts, and carries tools and materials weighing up to 150 pounds to position them on workbenches and in machine (1 hour). Grasps, handles, pushes, and pulls hacksaws, drills, mallets, punches, soldering irons, vise levers, and machine levers in assembling, repairing, and fabricating sheet metal parts (5 hours). Fingers calipers, dividers, micrometers, pencils, and scribers to mark and measure parts (1 hour). Reads blueprints and calibrations on measuring instruments (1 hour).

Details of working conditions: Works inside noisy sheet metal shop.

Details of hazards: Possibility of cuts from tools and sharp edges of sheet metal, and of burns from hot solder.

Figure 4 (45:118)

Form ES-100
(2-44)

WAR MANPOWER COMMISSION
BUREAU OF MANPOWER UTILIZATION

Budget Bureau No. 41-R088.2.
Approval expires February 28, 1946.

PHYSICAL DEMANDS FORM

Job title Chipper Occupational code 6-84.920

Dictionary title CHIPPER, METAL

Industry Ship and Boat Building and Repair Industrial code 3431

Branch Construction Department Outfitting Date 10-18-44

PHYSICAL ACTIVITIES		WORKING CONDITIONS	
X 1. Walking.	O 16. Throwing.	X 51. Inside.	X 66. Mechanical hazards.
O 2. Jumping.	X 17. Pushing.	X 52. Outside.	X 67. Moving objects.
O 3. Running.	X 18. Pulling.	O 53. Hot.	X 68. Cramped quarters.
O 4. Balancing.	X 19. Handling.	O 54. Cold.	X 69. High places.
X 5. Climbing.	O 20. Fingering.	O 55. Sudden temp. changes.	O 70. Exposure to burns.
X 6. Crawling.	O 21. Feeling.	O 56. Humid.	O 71. Electrical hazards.
X 7. Standing.	O 22. Talking.	O 57. Dry.	O 72. Explosives.
X 8. Turning.	O 23. Hearing.	O 58. Wet.	O 73. Radiant energy.
X 9. Stooping.	X 24. Seeing.	O 59. Dusty.	X 74. Toxic conditions.
X 10. Crouching.	O 25. Color vision.	O 60. Dirty.	O 75. Working with others.
X 11. Kneeling.	O 26. Depth perception.	O 61. Odors.	X 76. Working around others.
X 12. Sitting.	O 27. Working speed.	X 62. Noisy.	O 77. Working alone.
X 13. Reaching.	28.	O 63. Adequate lighting.	78.
X 14. Lifting.	29.	O 64. Adequate ventilation.	79.
O 15. Carrying.	30.	X 65. Vibration.	80.

16—93306-1 U. S. GOVERNMENT PRINTING OFFICE

Details of physical activities: Climbs about 100 feet up and down hull ramps twice daily, and about 60 feet up and down stairs and ladders 16 times daily, half the time while carrying 40 pounds of equipment (1 hour). Stands, sits, stoops, kneels, crouches, and turns, reaching above and below shoulder height to grasp, lift, handle, push and pull 13-pound chipping gun (7 hours). Observes chipping operations (7 hours).

Details of working conditions: Works in and around all parts of ship (frequently in cramped quarters).

Details of hazards: Possibility of injury from falling as far as 20 feet, of respiratory irritation from welding and burning fumes, of flashes from nearby welding arcs, of injury from flying metal particles, and of impairment of hearing from chipping and hammering noises and vibration.

Figure 5 (45:121)

Form ES-180
(Rev. 2-45)

Budget Bureau No. 11-R048.1.
Approval expires February 28, 1946.

WAR MANPOWER COMMISSION

BUREAU OF MANPOWER UTILIZATION

PHYSICAL CAPACITIES FORM

Name William A. Bradford Sex M Age 30 Height 69 Weight 170

PHYSICAL ACTIVITIES			
	1 Walking		16 Throwing
	2 Jumping		17 Pushing
	3 Running		18 Pulling
	4 Balancing		19 Handling
O	5 Climbing		20 Fingering
	6 Crawling		21 Feeling
	7 Standing		22 Talking
	8 Turning		23 Hearing
	9 Stooping		24 Seeing
	10 Crouching		25 Color Vision
	11 Kneeling		26 Depth Perception
	12 Sitting		27 Working Speed
	13 Reaching		28
	14 Lifting		29
	15 Carrying		30

WORKING CONDITIONS			
	51 Inside	O	66 Mechanical Hazards
	52 Outside	O	67 Moving Objects
	53 Hot		68 Cramped Quarters
	54 Cold	O	69 High Places
	55 Sudden Temp. Changes	O	70 Exposure to Burns
	56 Humid	O	71 Electrical Hazards
	57 Dry	O	72 Explosives
	58 Wet		73 Radiant Energy
	59 Dusty		74 Toxic Conditions
	60 Dirty	O	75 Working With Others
	61 Odors		76 Working Around Others
	62 Noisy	O	77 Working Alone
	63 Adequate Lighting		78
	64 Adequate Ventilation		79
	65 Vibration		80

Blank Space = Full Capacity: √ = Partial Capacity: O = No Capacity

May work _____ hours per day _____ days per week. (If TB, cardiac or other disability requiring limited working hours).

May lift or carry up to _____ pounds.

Details of limitations for specific physical activities _____

Details of limitations for specific working conditions _____

Someone working near this man should come to Medical department for instructions on how to look after him during a seizure.

Date October 15, 1944 Physician C. A. Mills, M. D.

659270°—45——9

Figure 6 (45:123)

The material contained within this booklet was selected from the experiences of a number of tried programs and was prepared for the employer. Its relevancy to this study was considered on its merits and upon it the assertion that it was written with the smaller employer in mind (1). Although the disabled veteran was the principal concern of the study disabled citizens were also considered.

The program recommended was predicated on the following seven steps (1:5-30):

A. The adoption of a clear policy.

This step was considered of cardinal importance to the employment of all physically impaired and its success was correspondingly dependent upon managerial attitude and the soundness of its sponsored interest. Relevant items for the establishment of a successful policy were (1:6):

> 1. Make every possible effort to place the individual in a job selected to fit his capacities and interests, keeping in mind the job's requirements.
>
> 2. Train him to do that job successfully, regardless of his past experience, so that he can overcome any temporary feeling of incapacity or uncertainty.
>
> 3. Acknowledge that the physically impaired are individuals who are entitled to an opportunity to live productive lives and deserve treatment becoming their personalities and attitudes.
>
> 4. If the individual's physical impairment is noticeably severe, place special emphasis on informing the worker's supervisor

of his or her abilities, to overcome possible initial prejudices and further help to relieve any self-conscious feeling the impaired worker may have.

5. Discard any belief that a rehabilitation program is a "necessary evil." Be convinced that it has real economic and social value to the employer, the worker and the whole community. A program for employing the physically impaired does not vary materially from the more successful personnel procedures used by most employers.

The following suggestions concerning the returned veteran may also have relevancy for other disabled individuals (1:6-7):

1. Have an official of the company welcome the service man when he first returns.

2. Arrange for him to meet the boss and fellow workers, even though he may not be assigned to a job immediately.

3. Recognize the obligations owed to each returning veteran.

After the policy has been adopted make it known to the entire supervisory staff, so that each man directing personnel will clearly interpret it and understand what is expected of him. In addition to understanding, each must be sold on the sincerity and value of the policy adopted.

Point out to the supervisory staff how to meet the human and technical problems apt to arise. This is done preferably in a "discussion group" which gives the supervisors a part in the procedure. As a substitute method information from authoritative sources may be reproduced and distributed to the supervisors... It is important to remember that normal Job Instruction or Supervisory Training Techniques should be supplemented with additional information and training.

Show interest in the program. Often supervisors believe they are detached from the immediate problems of the organization and begin to taper off in enthusiasm when something

> newer takes their attention. This is especially so with a procedure, such as a rehabilitation program, which may seem to the supervisor to be only remotely connected with his big problem--production. However, when management shows that it is genuinely interested by contacting its supervisors regularly, a lag in interest will be deterred and the importance of maintaining the program will be emphasized. These contacts can be made through meetings or memos, approaching the supervisors on their ideas, difficulties and the program's progress.

B. The survey of the job requirements.

The physical requirements of the operations of the job required a detailed investigation for the job survey (1:8).

In this particular aspect of the problem the suggested approach was very similar to that previously described for the United States Employment Service. Specifity and definitiveness may have been added to the problem, however, by the following discussion of this phase of the study (3:8-12):

Practical questions concerning the job were instrumental in bringing the discussion down to a more useful basis. For instance, how much walking was necessary to reach the washroom? Did stairs have to be negotiated? In order to reach the job must a danger area be crossed and if so, was acute hearing and vision necessary for safety?

The following form was recommended as a guide (1:9):

This properly completed chart provided (3:8):

1. A list of physical requirements for various jobs.

2. A systematic arrangement of items to investigate.

3. A terse report of the results of the investigation.

The danger of extreme refinement and an overabundance of analytical precision as a source of cumbersomeness was stressed.

For the sake of concision the terms in Figure 3 were very brief and a description of certain of these terms was provided for clarity of understanding (2:11-12):

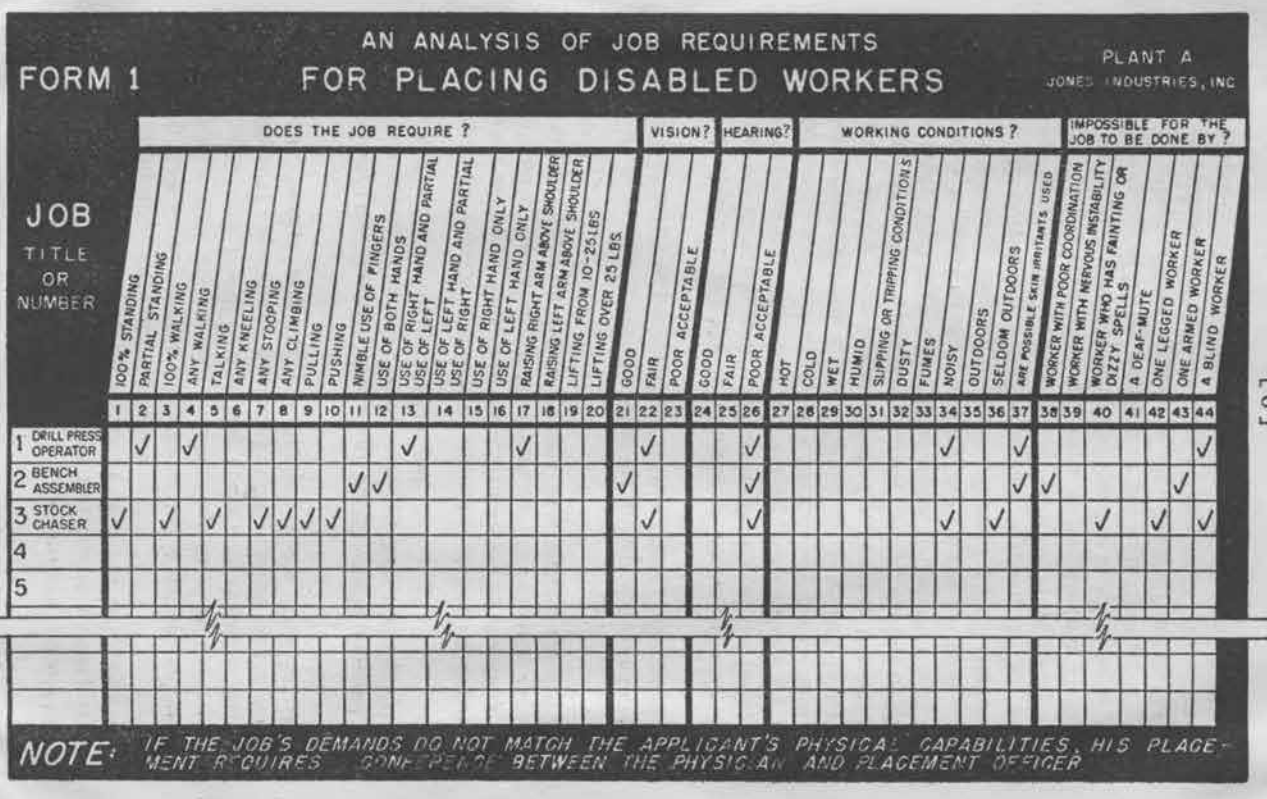
Talking.--Was talking an integral part of the job? Did the applicant need the ability to speak without impediment such as a receptionist, salesperson, trainer, supervisor, etc?

Pulling.--Did equipment such as hand-trucks, dollies, stock wagons, portable machines, or anything else of similar mass need to be pulled?

Hot.--Where the job had to be performed in higher than usual hot weather temperature it was considered hot.

Humid.--Where the per cent of humidity was in excess of the usual atmospheric local humidity above 75°F. and below 60° F. the working conditions were classified as humid.

Dusty, Fumes.--These conditions were present


FORM 1
AN ANALYSIS OF JOB REQUIREMENTS
FOR PLACING DISABLED WORKERS
PLANT A
JONES INDUSTRIES, INC
JOB TITLE OR NUMBER
DOES THE JOB REQUIRE ?
VISION?
HEARING?
WORKING CONDITIONS ?
IMPOSSIBLE FOR THE JOB TO BE DONE BY ?
100% STANDING
PARTIAL STANDING
100% WALKING
ANY WALKING
TALKING
ANY KNEELING
ANY STOOPING
ANY CLIMBING
PULLING
PUSHING
NIMBLE USE OF FINGERS
USE OF BOTH HANDS
USE OF RIGHT HAND AND PARTIAL USE OF LEFT
USE OF LEFT HAND AND PARTIAL USE OF RIGHT
USE OF RIGHT HAND ONLY
USE OF LEFT HAND ONLY
RAISING RIGHT ARM ABOVE SHOULDER
RAISING LEFT ARM ABOVE SHOULDER
LIFTING FROM 10-25 LBS.
LIFTING OVER 25 LBS.
GOOD
FAIR
POOR ACCEPTABLE
GOOD
FAIR
POOR ACCEPTABLE
HOT
COLD
WET
HUMID
SLIPPING OR TRIPPING CONDITIONS
DUSTY
FUMES
NOISY
OUTDOORS
SELDOM OUTDOORS
ARE POSSIBLE SKIN IRRITANTS USED
WORKER WITH POOR COORDINATION
WORKER WITH NERVOUS INSTABILITY
WORKER WHO HAS FAINTING OR DIZZY SPELLS
A DEAF-MUTE
ONE LEGGED WORKER
ONE ARMED WORKER
A BLIND WORKER
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44
1 DRILL PRESS OPERATOR
2 BENCH ASSEMBLER
3 STOCK CHASER
4
5
NOTE: IF THE JOB'S DEMANDS DO NOT MATCH THE APPLICANT'S PHYSICAL CAPABILITIES, HIS PLACEMENT REQUIRES CONFERENCE BETWEEN THE PHYSICIAN AND PLACEMENT OFFICER

[9]

Figure 7 (1:9)

where non-toxic nuisance dusts, vapors and fumes or toxic fumes, vapors and dusts that are an integral part of the job but in safely diffuse concentrations.

C. "Standardized" interview used.

The usual information desired by the employer concerning the applicant was (1:13-14):

1. Name.
2. Home address and telephone number.
3. Date and place of birth.
4. Whether married, and if so, how large a family.
5. Schooling and major subjects.
6. Special training, if any.
7. Employment records, including kind of work performed and reasons for leaving.
8. Hobbies or avocations.
9. Health. When the applicant has a physical impairment, the interviewer will want to know whether he feels immeasurably handicapped because of his impairment or whether he believes he can successfully compete with able-bodied workers if given proper opportunities.
10. Accident experiences. A valuable guide to proper placement is information, when it can be obtained, of what accidents, if any, an individual has experienced. This is especially important if the worker has had repeated accidents of the same type and from the same causes.

The mere filling out of the application blank did not satisfactorily furnish the required data for the last six items above and the interviewer consequently discussed them with the applicant. During the interview subjective data relevant to the client and his manner of answering questions and general department were mentally noted for future reference (1:14). Although the interview was conducted in a friendly fashion it was

planned to prevent undue conversation and to assure the inclusion of many essential facts. The "standardized" procedure was also used to insure uniformity of data gathered and consequently permit meaningful comparisons of various applicants and their qualifications (1:14).

Testing, where used, and a medical examination customarily completed the interview (1:15).

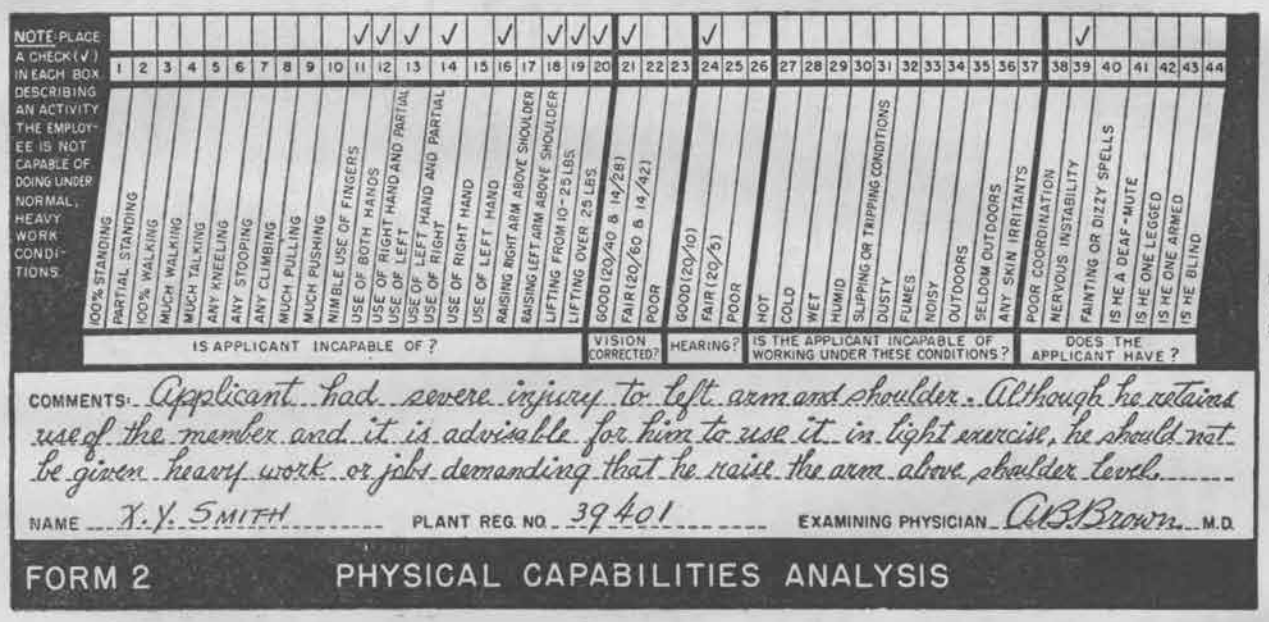
Where an applicant was severely handicapped he was tactfully asked, at an opportune time, his ability to take care of his physical needs. This important question was preceded by an explanation for its necessity (1:15). Finally, the determination of the physically handicapped toward his disability was ascertained, if possible, through the friendly approach at the interview (1:15).

D. Ascertaining physical capacities of clients.

Just as the United States Employment Service utilized the necessity of placement of the disabled in a job compatible with the impairment as a point of departure from the consideration of the placement of the physically normal, so did the authors. In this latter case, also, the necessity for a medical examination was inescapable (1:16).

The analagous manner of approach made by the Employment Service was revealed by a comparison of Figure 8 and the corresponding figure shown on page .

Obviously, the determination of the physical capabilities of the client was made on the basis of the



NOTE: PLACE A CHECK (✓) IN EACH BOX DESCRIBING AN ACTIVITY THE EMPLOYEE IS NOT CAPABLE OF DOING UNDER NORMAL, HEAVY WORK CONDITIONS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
	100% STANDING	PARTIAL STANDING	100% WALKING	MUCH WALKING	MUCH TALKING	ANY KNEELING	ANY STOOPING	ANY CLIMBING	MUCH PULLING	MUCH PUSHING	NIMBLE USE OF FINGERS	USE OF BOTH HANDS	USE OF RIGHT HAND AND PARTIAL	USE OF LEFT	USE OF LEFT HAND AND PARTIAL	USE OF RIGHT	USE OF RIGHT HAND	USE OF LEFT HAND	RAISING RIGHT ARM ABOVE SHOULDER	RAISING LEFT ARM ABOVE SHOULDER	LIFTING FROM 10 - 25 LBS.	LIFTING OVER 25 LBS.	GOOD (20/40 & 14/28)	FAIR (20/60 & 14/42)	POOR	GOOD (20/10)	FAIR (20/5)	POOR	HOT	COLD	WET	HUMID	SLIPPING OR TRIPPING CONDITIONS	DUSTY	FUMES	NOISY	OUTDOORS	SELDOM OUTDOORS	ANY SKIN IRRITANTS	POOR COORDINATION	NERVOUS INSTABILITY	FAINTING OR DIZZY SPELLS	IS HE A DEAF-MUTE	IS HE ONE LEGGED	IS HE ONE ARMED	IS HE BLIND
											✓	✓	✓	✓		✓		✓	✓	✓	✓				✓														✓						
	IS APPLICANT INCAPABLE OF ?																				VISION CORRECTED?			HEARING?			IS THE APPLICANT INCAPABLE OF WORKING UNDER THESE CONDITIONS?											DOES THE APPLICANT HAVE ?						

COMMENTS: Applicant had severe injury to left arm and shoulder. Although he retains use of the member and it is advisable for him to use it in light exercise, he should not be given heavy work or jobs demanding that he raise the arm above shoulder level.

NAME X.Y. SMITH PLANT REG. NO. 39401 EXAMINING PHYSICIAN A.B. Brown M.D.

FORM 2 PHYSICAL CAPABILITIES ANALYSIS

[17]

Figure 8 (1:17)

job. The comparatively broader field covered by this form and by relevant forms (see pp.84,85) for the Employment Service was indicated by the industry-wide nature of the job covered by the former form (1:16). A check was placed in the appropriate blank for activities or work conditions which the applicant could not physically perform.

For the sake of conciseness terms of brevity were used as was the case for the blank for physical requirements of the job. A consequent description of certain terms was provided for clarity (1:19):

> Does the Applicant Have
>
> POOR COORDINATION--That is, does he have poor reflexes? Would it be inadvisable to place him on a job requiring hand and eye coordination or similar coordinated movements to maintain safety and production? Is he a spastic? Is some other condition apparent that will affect his neuro-muscular control, such as tabes dorsalis? (1:19)
>
> NERVOUS INSTABILITY--Is the applicant highly nervous? Does he lack self assurance? Might he be afraid of the job, or of high powered machinery? Would he be suitable for a job where his fear and lack of confidence might lead him to make poor judgments and endanger his safety or the safety of others?

The vocational success of the impaired was largely dependent on the accuracy of the determination of the physical capacities (1:19) and the absence of a company staff doctor consequently was a serious bar to suitable placement. If the services of a private physician in the vicinity of the plant could be

satisfactorily engaged, however, excellent results would probably have been obtained (1:19).

E. Selective placement.

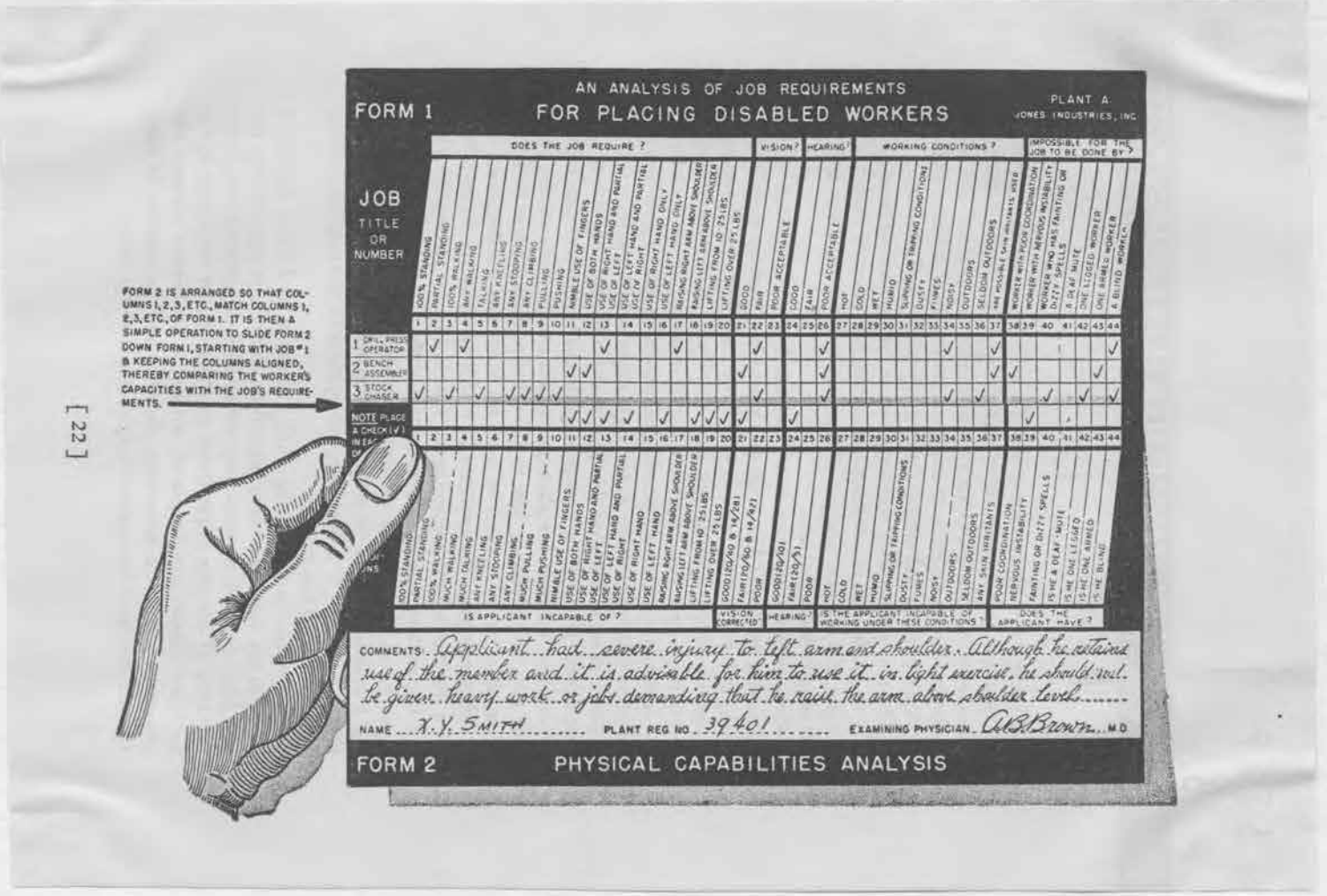
Through a review of the interview, the medical analysis of the applicant and his capabilities and the job requirement analysis, the placement officer was considered to be in an intelligent position to place the applicant correctly (1:21).

His consideration as an individual, his personal preferences, and his background were among the factors reviewed by the placement officer (1:21).

Thirdly, the available jobs were investigated in order, and where none were available which were suitable for the client such jobs were nevertheless discussed with the applicant prior to placement in another position, in order that he might know that an effort had been made to meet his wants and qualifications (1:21).

Selective placement of applicants by matching physical capabilities with the requirements of the desired job (1:21) was utilized analagously to the manner of the Employment Service. In Figure 9 below the forms reveal the procedure (1:22).

Where the checks on the two forms corresponded, it was considered that the job requirements were probably beyond the physical capacities of the applicant (1:21). Where no suitable jobs were available, the



[22]

Figure 9 (1:22)

applicant was not recommended for placement prior to a conference between the placement officer, the examining physician and the management personnel assigned the responsibility of maintaining safety (1:21).

Insofar as testing was concerned the following conclusions were reached (1:23-24):

Indiscriminate use of mechanical aptitude tests proved unsuccessful. Where the plant had tested the test in its shops more encouraging results were obtained (1:23). Clerical aptitude test results were good although industrial psychologists as a rule did not have much confidence in personality and temparament tests (1:22). The results of intelligence tests were satisfactory measures of intelligence (1:23).

It was thought that if psychological testing were to be utilized that it should be used for the purpose of determining whether the applicant had the intellectual ability and aptitude to do a specific job (1:23). It was also felt that the assistance of an experienced tester familiar with the particular tests was essential to maximum testing success (1:23).

Finally,

> Placement and job transfer of physically impaired workers, either within a department or from one department to another necessitates a central control...Ordinarily the supervisor contemplating a transfer writes a request, giving his reasons, and sends it to the placement officer, who follows the procedure used in originally placing the impaired worker. Every effort should be exerted to prevent

> indiscriminate job transferring of disabled workers. Otherwise the objectives strived for in their initial placement will be lost (1:24).

F. Acquainting the worker with the job (1:25-27)

The authors stated that the newly placed employee was frequently nervous and uncomfortable his first few days on the job. This doubt of ability to succeed and a feeling of wonder concerning the impression made on the supervisor was, it was thought, more likely to occur among the disabled than among the able-bodied. The prominence entailed by the impairment was presumed to have rendered more acute to the worker the seriousness of mistakes made. In many concerns the evil effects of this emotional maladjustment were at least partially ameliorated through personal introductions to supervisors and through a description of the policies and historical development of the company. This "breaking-in" of new employees also contemplated outlining the procedures of every job prior to the inception of actual work, in addition to actual on the job training (1:25).

A correct start and thorough preparation to ensure success of the physically impaired worker was considered of inestimable value. The emphasis was placed on the capabilities of the disabled and the cardinal importance of their appreciation by the instructor. A recent unpublished study reviewed by the authors indisputably revealed the worthiness of this

preparation and selective placement. The properly placed disabled workers in the group studied showed a marked superiority in production, rate of pay and reliability (1:26:27).

G. Preparation of a regular follow-up.

This was considered a process by which the correction of placement errors for the handicapped was facilitated and was accomplished by one of the following departments in the various concerns studied (1:28):

1. Personnel Department.
2. Safety Department.
3. In some cases, the Medical Department. This is only true in companies having a full time medical department staffed with one or more assistants who, in many instances, are former shop workers familiar with most of the employer's jobs and are assigned specifically to check the placement of disabled workers. The general practice of the large employer is to assign a member of the personnel department to follow up the placement of impaired workers ...Whoever handles this job should understand his responsibility.

The authors stated that the follow-up visit should be repeated at least once a month for 3 or 4 months or until such time as proper placement was a certainty (1:28). The importance of follow-up by the supervisor was considered supreme and the danger of misconceptions by the supervised worker was recognized. This danger could be avoided through the creation of a friendly atmosphere during the periodic visits (1:28-29). The desirability of having someone from the "front office" also participate in the follow-up was, however,

also recognized (1:29).

The question of safeguarding the health and physical well-being of the impaired was primarily one of correct initial placement and ensuing follow-up. When assigned to the proper job the regular safety measures applied to the handicapped (1:30). The primal consideration was the fitting of the man to the job rather than engineering changes in the job to fit the man. Redesign of plant set-up was considered only as a very last resort (1:30).

During emergencies only measures would be undertaken to help the disabled worker about the plant (1:30).

Other investigations have probed the field of study but their conclusions relevant to proper placement were similar in nature to the studies reviewed above.

Clark D. Bridges, Director of Conservation Services of the Zurich Insurance Companies of Chicago, Illinois, stated that an appreciable percentage of the disabled job applicants have little or no vocational training or industrial experience (9:9). He also recognized the individuality of the impaired and specifically realized the myriad educational backgrounds and aptitudes possessed by the disabled (9:29). For this reason he advocated the use of wisely chosen, and carefully administered aptitude tests by experienced and adequately trained personnel (9:29) with suitable

assistance, when necessary, from consulting industrial psychologists (9:29) prior to the inception of lengthy training programs (9:29).

The spectacular success of the Training Within Industries Division of the War Manpower Commission, such as Job Instruction Training, could, he stated, be realized for the disabled to a comparable degree to that for the able-bodied (7:30). In his approach to "Job Placement for the Physically Handicapped," Bridges stated (9:30):

> ...The value of ample training of disabled individuals in addition to selection and placement on the basis of physical capacities, has been demonstrated in the study of the production efficiency of orthopedically disabled workers made by Tobias Wagner, Center for Safety Education, New York University. This study reveals that, with proper training, disabled workers tend to be better producers, with better safety records, than equivalent normals on the same job. In this study and in the experience of other firms, lies perhaps one of the most important clues to greater industrial efficiency and improved accident prevention...

V. Virtues of pre-vocational and vocational training relvant to suitable placement.

Insofar as vocational training or pre-vocational training of the disabled with a particular handicap, deafness for instance, certain procedures peculiar to that disability have often been advantageously applied (34:57).

Robert E. Thomas and John A. Kratz, Special Agent and Director, respectively, of the Vocational

Rehabilitation Division of the United States Office of Education, concluded that from the results of their studies that after the selection of an employment objective the ensuing step was the choice of a training facility (34:57). This latter selection was also based upon the extent to which normal hearing was required by the instructional method (34:57).

They concluded from data gathered prior to 1941 that:

Colleges and Universities had successfully trained hard-of-hearing where the clients had been selected carefully but that college training was only occasionally successful for those so impaired that reliance had to be placed entirely on lip reading for speech understanding. The Gallaudet College of Washington, D.C., the only four-year college for the deaf in the United States, was declared the most practicable source of college training for deaf students. Correspondence courses were thought by certain individuals to be of practical value despite the general disfavor with which they were regarded by vocational rehabilitation supervisors, who often questioned the reading ability of many deaf and hard-of-hearing students. The value of demonstration methods was given the acid test of trial and error in private trade schools, public vocational schools, business colleges and other organized training institutions in addition to private

schools of beauty culture. With progressive increases in severity of the handicap, the percentage of clients trained by employment methods became correspondingly large (34:57).

> ...In 1937, of 261 rehabilitation clients classified as hard of hearing, only 21 percent were given employment training; of the 160 classified as deaf-mutes, 62 percent were given employment training.

In certain States, the authors found that employment training was effectively used as a breaking-in process for deaf clients who had previously been trained at the State school for the deaf (34:57). Another device sometimes found useful was the practice of allowing training contracts for the hard-of-hearing and deaf to cover a longer period than for rehabilitation clients with normal hearing, particularly for those for whom most instruction had to be given by demonstration (34:58).

The tendency of those with impaired hearing to become suspicious or discouraged could, the authors felt, be eliminated by <u>early</u> discovery of the cause of friction or discouragement and its prompt removal. The commonly encountered inadequate conception of time by the deaf often led to a display of disregard for regular hours. Partial hearing of criticism frequently entailed extraordinary sensitiveness to criticism through subjective magnification. This mild tendency toward paranoia led to ready imagination of the instructor as a Simon

Legree. Such an emotional maladjustment may have resulted in sudden and unexplained cessation of the training program. Frequent misunderstandings were often brought into being by a tendency of the worker with impaired hearing to pretend to understand instructions rather than ask for information which he did not hear (34:58).

The authors recommended that, in some instances, members of the family be contacted for causes of misunderstanding or sources of despair of those with impaired hearing (34:59).

The hearing worker and the hearing supervisor did not always realize, the authors found during the year 1941, that even on jobs where talking was unimportant that special allowances often had to be made. Shouted warnings were frequently useless and the failing apperception for such commonplace sounds as doorbells, telephone rings and motors was all too commonly overlooked (34:59).

The axiomatic rule that all disabled are recommended for placement on the basis of their abilities was enhanced through proper training and for such people numerous employment opportunities were found to exist in private industry, particularly among small employers. Even so, the potentialities of "selling" one such rehabilitant to the employment manager of a large concern was indisputably revealed by a cited example.

During the pre-depression days, the Goodyear Rubber Company of Akron, Ohio, hired about 800 deaf people and would have hired more had they been available (34:59).

The essential follow-up which was a "must" for many of the deaf, in order to avoid possibilities for friction and antagonism also evolved frequent in-service training suggestions. Through attendance at night schools preparation for additional job duties for subsequent advancement have been secured. The painstaking care for the first placement in a concern may return priceless dividends to the placement officer, the authors found, in the form of future employment opportunities for others afflicted (34:60-61).

Conferred advantages through prosthesis, surgery, hospitalization, and other remedial measures for physical restoration

The once popular but outmoded rehabilitation concept of "training around the disability if possible" was altered to the slogan "never train around the handicap if it can be removed" (34:31), and has been instrumental in the advance to the front ranks of physical restoration in vocational rehabilitation.

The deaf.--The statistically significant section of the nation afflicted with impaired hearing presented a logical point for departure from passe considerations of placement. In this particular impairment a natural division of categories inevitably

become sharp and distinct with investigative progress of students in the field as the year 1941 drew to a close (23). This vital distinction between the deaf and the hard-of-hearing was endowed with definitive clarity by the White House Conference on Child Health and Protection (34:3).

> The deaf are those who were born either totally deaf or sufficiently deaf to prevent the establishment of speech and natural language; those who became deaf in childhood before language and speech were established; or those who became deaf in childhood so soon after the natural establishment of speech and language that the ability to speak and understand speech and language has been practically lost to them.
>
> The hard of hearing are those who established speech and the ability to understand speech and language, and subsequently developed impairment of hearing. These children are sound conscious and have a normal, or almost normal, attitude toward the world of sound in which they live.

The importance of appreciating this distinction insofar as physical restoration was concerned was depicted in 1941 by Thomas and Kratz as follows (34:31):

> ...These services (assisting the client to overcome his handicap in communication) are hearing aids, lip reading, speech correction and reeducation of residual hearing. Since in most instances these services are feasible only for the hard of hearing, and not for the deaf,...Rehabilitation workers agreed that these services should be given to the hard of hearing and that the deaf should be rehabilitated through guidance, training and placement.
>
> ...In following this counsel (Never train around the handicap if the handicap can be

> removed) rehabilitation workers should make every effort to assist the client to make the utmost use of whatever usable hearing capacity, however little, he has retained. Only in cases of total deafness to speech can hearing be ignored. Hearing aids, in many cases, may either remove the handicap or materially reduce it.

The vocational and associated advantages to be realized through the adoption of a hearing aid was considered by Dr. Gordon Berny in 1941 to be dependent upon the amount of hearing loss incurred (34:34). His survey among the hard-of-hearing impelled him to state that one with an average speech loss of from 20 to 40 decibels could receive much value from a hearing aid but that he would rather not wear one. In his experienced judgment those with losses ranging from 40 to 60 decibels needed an aid but often waited until the impairment grew worse. However, he felt that this group received the greatest help from the aid. Those with losses of from 60 to 80 decibels required an aid for all conversations but the advantages realized by the latter group from the appliance was decidedly less than for the group with losses of less than 60 decibels. Losses of between 80 and 100 decibels could not be compensated to any appreciable degree by an appliance and the sole use of an aid was for supplementing lip reading (34:34).

Suggestions of the Vocational Rehabilitation Division of the United States Office of Education also implied that the vocational value of a hearing aid was

dependent, in a measure, upon the loss suffered and other physical factors (34:34-35):

1. Best results were expected for average losses of from 45 to 70 decibels.
2. For losses of less than 45 decibels a hearing aid could have been purchased if there were indications that the client would wear it frequently enough to justify the cost.
3. For clients with average losses of from 70 to 90 decibels an aid could have been bought if there was a reasonable expectation that the client would have received sufficient benefit to justify the cost.
4. For the more severely afflicted evidence of past successful use was considered a favorable omen for future success.
5. On the other hand, a hearing aid was considered a feasible purchase for one who recently had lost some hearing since the ability to interpret amplified sounds of speech had not been lost.
6. In general, clients with uniform heavy loss throughout the frequency range of speech realized greater benefits since hearing aids with even amplifications have been more successful than selective amplification aids.
7. Youthful clients usually adjusted to hearing

aids more readily than older ones.

8. Where conversation was a necessity in the occupation, the aid should have been furnished more promptly than in other instances.
9. Poorly adjusted emotional cases were often bad risks. Clients who refused to accept their handicap and the shy, retiring person was sometimes unable to interpret intelligently amplified and distorted sounds which could be unpleasant.
10. Where one was in a very nervous state he was usually unable to adjust to an appliance unless the nervousness was directly the result of hearing strain which could be eliminated by the hearing aid.
11. Where progressive deafness was encountered no appliance was often recommended but in many other cases the hearing aid was apparently justified and a feasible purchase because (34:35-36):
    1. The report of the atalogist may have been unduly dark regarding prognosis.
    2. Recent improvements in hearing aids had increased their utility to those with seriously impaired hearing.
    3. Adaptability of the instrument to changes in the hearing of the client

permitted some compensation for increases in hearing losses.

12. The groundless fears of the impaired that the use of an instrument injured the residual hearing discouraged a number of the hard-of-hearing from wearing appliances. Evidence gathered by Alex and I.R. Ewing in extensive clinical experience, on the contrary, indicated that not only was no damage sustained; but that with superb instruments combined with lip reading an improvement in acoustic intelligence was revealed (34:36).

Insofar as lip-reading was concerned, Miss Betty Wright, executive director of the American Society for the Hard of Hearing, stated in 1941, that (34:36):

> Not every student of lip reading becomes a good lip reader, but the byproducts possess a market value of their own. These byproducts bring self-reliance, independence, courage to carry on; a different outlook on life, and an increased joy in living; a quickening of the mental facilities; better understanding of human nature; a dimunition of sensitiveness and the loss of feelings of inferiority.

Two other remedial measures which were used in addition to the above corrective actions were speech correction and re-education of residual hearing (34:47-49).

The tuberculous.--Another statistically significant section of the nation was afflicted with pulmonary tuberculosis at one time or rather during some

period of life (16). The unique nature of physical restoration measures relevant to vocational rehabilitation and their interdependent relationship have posed unusual problems of placement (25:69). Dr. Norwin C. Kiefer, Surgeon of the Office of Chief of the Tuberculosis Control Division of the United States Public Health Service and Liaison Officer to the Office of Vocational Rehabilitation collaborated with Holland Hudson, Director of the Rehabilitation Service of the National Tuberculosis Association in the publication of these relevant statements (25:70-71) of duties of the rehabilitation agency:

> ...D. Preparation for employment (while in sanatorium and/or during post-sanatorium period) includes:
>
> 1. Assisting patient to select from available services within the sanatorium and from outside sources, those which will contribute to attainment of the vocational objective.
>
> 2. Making provision that selected services are made available to patient as a part of his graduated program and in accordance with the physician's plan for the patient. Such services may include:
>
> a. Psychiatric treatment
> b. Prevocational training
> c. Vocational training
> d. Supplementary or refresher training
> e. Work therapy
> f. Occupational therapy
> g. Educational supplies
> h. Occupational tools and equipment
> i. Maintenance and transportation
>
> 3. When needed services are not available, discovering and stimulating creation of services to meet requirement of a rehabilitation plan for the individual.
>
> 4. Coordinating the rehabilitation program with the other sanatorium activities planned for the patient.

5. Continuing counseling with the patient during preparation period, and evaluating the progress of the patient and services in terms of their contribution to his vocational adjustment.

6. In cooperation with medical social service, arranging for post-sanatorium treatment and care and the continuation of the vocational program.

7. Making necessary provision to meet the patient's personal, social and economic needs and those of his dependents during the preparation period.

8. Encouraging the patient during post-sanatorium period to comply with medical care program as he carries out his rehabilitation plan (25:70).

E. Placement in suitable employment requires planning and a variety of action, such as:

1. Prior to completion of preparation for employment, exploring possible work opportunities suitable to the individual.

2. Discussing and developing with the patient, a specific program of securing suitable employment, emphasizing particular requirements of the job and his adjustment to such work.

3. Interpreting to the selected employer the abilities of the individual and completing a plan for placement, including graduated work activity when necessary.

4. Assisting in the introduction and initial adjustment to the job.

5. Maintaining continuing relationship with employer and client until satisfactory vocational adjustment is insured.

Insofar as chronic heart disability was concerned--designated in 1941 by Louise Neuschutz as "...the major chronic ailment of our time." (26:22) physically restorative measures were deemed inseparable from any sound vocational rehabilitationprogram (26:21-28).

Medically remedial treatments for chronic

impairment were largely associated with restrictions of activity or possibly changes in vocation to less strenuous endeavor (26:21-28). The determination of the severity of the disability was entirely left in the hands of the examining physician.

Physical restoration of the amputee.--Dr. Henry H. Kessler, prosthetic consultant for the United States Office of Vocational Rehabilitation, and an internationally known authority on orthopedic and cineplastic surgery and rehabilitation, who is also a diplomate of the American Board of Orthopedic Surgery and a fellow of the American Academy of Orthopedic Surgery, out of his wealth of experience in charge of the amputation center of the Navy Hospital at Mare Island, California, and from his work as attending orthopedic surgeon at the Newark City Hospital, Beth Israel Hospital at Newark, the Hasbrouck Heights (N.J.) Hospital, and the Hospital for Crippled Children, Newark, in 1941 tersely summarized the situation faced by the amputee and the only practicable solution presently known in the following words (39:1):

> During the four years of World War II between 17,000 and 18,000 military casualties in the United States forces resulted in amputations. During the same period, a minimum of 120,000 civilians suffered amputations from disease, injury or congenital deformity. The rehabilitation of this latter group is important not only because of their numbers but because of the special problems that arise by virtue of age, complicating diseases and their special economic status.

> All amputees are faced with a triple threat to their social and economic schemes of life: first of all by the physical defect itself which impairs their working capacity, by the psychological reaction to their disabilities, and, most of all, by the public prejudice which regards the amputee as a social leper and condemns him as unfit to take his place in society.
>
> This threat can be removed by providing the amputee with a prosthesis. By replacing the lost function with an artificial substitute, working capacity can be restored. Restoration of function and normal appearance bring confidence while the camouflaged defect eliminates the truculent attitude of the public.

He classified the amputees by extremes and averages pertaining to their degree of acceptance of their affliction as (39:1):

1. Those who, despite such severe disabilities as bilateral above the knee amputations, have made amazing adjustments due to educational background, business or professional experience, favorable social experience, or an indomitable will to succeed in any situation.
2. Those who are completely crushed by their misfortune or its emotional sequela.
3. The large intermediate group which gallantly yet imperfectly struggles against the tide of circumstances.

For this latter group he felt that rehabilitation was the helping hand that could ease their path to employability and self-support (39:1).

The terrible results of well-meaning but

ignorantly given advice was exemplified by the 16-year old boy who had suffered a below-the-knee amputation from an automobile accident 12 years previously. His own doctor and the neighbors advised the mother to wait until he had grown up for prosthesis. During these twelve years he had been stigmatized as a cripple through school and was ostracized from many of the never-to-be forgotten activities of a delightful childhood. Even more important from the physical restoration point of view was the fact that he had lost priceless years of practice in the use of a prosthesis (39:182).

The invaluable advice of a gifted counselor was illustrated by its omission in the case of a below-the-knee amputee who was wearing twelve stump socks where three at the most was advisable. If three stump socks did not suffice, relining of the limb or replacement was necessary (40:2).

In another instance a patient was suffering from an ulcer at the end of his stump but had been depending on the adjustment of the limb maker to correct the condition (39:2).

In yet another case a client with a bilateral below-the-knee amputation necessitated from diabetic gangrene was subsequently discovered to have a high blood sugar reading. His failure to cooperate with the doctor had a fearful effect on his health (39:2).

As Dr. Kessler said in 1941 (39:2),

> These cases illustrate the traditional one-dimensional approach to the needs of the amputee. The limb maker is interested in his profit, the surgeon in his pet operation, and the inventor in his pipe dream. It is the rehabilitation counselor's responsibility to help, advise, assist and guide the amputee throughout his adjustment. All loose ends of service have to be unified and integrated through his services into a three-dimensional program.

Recapitulation

In reviewing the literature relevant to the problem this statement in the "Foreword" of "Selective Placement for the Handicapped," the 1945 official statement of policy of the United States Employment Service, summarized succintly the content of these published studies (45):

> ...No job needs be set aside for the handicapped, but all jobs can be regarded as potentially suitable.

Chapter III

METHODS AND MATERIALS

The data gathered for this study were obtained by the writer in the workaday performance of a counselor and supervisor of the occupationally impaired in Northeastern Colorado 1/. All such information gathered in his official capacity as an employee of the Vocational Rehabilitation Division of the Colorado State Board for Vocational Education was obtained under the promise of confidential protection and was treated solely with the thought of obtaining employment in positions physically compatible with the disability of the clientele concerned.

To insure completeness and consistent uniformity of the assembled information for this study, the use of a form for recording the data previously collected by the counselor from personal interviews with claimants in the field was considered expedient 2/. This device enabled the writer to tabulate for each of the cases in this sample the concrete disabilities in a visually comprehensible manner. These data were

---

1/ See Appendix A for map of studied area.

2/ See Appendix A for Master Sheet.

compiled from information recorded on a large number of forms designed by the antecedent agency to assist its counselors to visualize effectively an objective picture of every prospective rehabilitant eligible for its services.

During his association with the rehabilitation agency for the fiscal year, 1947, the agent was privileged through access to information contained in the aforesaid forms to examine and consider rather carefully each of the 62 individuals rehabilitated by this organization in Northeastern Colorado from July 1, 1946 to July 1, 1947. Twenty-two of the 62 so placed in remunerative employment in an occupation compatible with their disabilities were precluded from the sample selected. These 22 were not included in the sample for several reasons: some were employed outside the geographical limits of the problem; a few were "closed" as married, and several others were excluded for miscellaneous reasons.

The study of the area was confined to those rehabilitated by the aforementioned agency simply because there was no other source from which relevant data could be obtained.

Materials

The 8½"x11" case referral Form VR-20 3/ is

3/ See Appendix B for Form VR-20.

ordinarily the initial point at which information is gathered for the formulation of vocational rehabilitation plans for the prospective rehabilitant. This is true for clientele referred by cooperating Federal and State establishments to the vocational rehabilitation agency serving northeastern Colorado. Conversely, it does not generally pertain to self-referrals and to those to whom attention is drawn by privately organized institutions.

Incorporated within this form are the names, addresses, ages, disabilities, marital status, occupation, present employment and remarks. The source of the referral is, of course, included along with the name of the individual referrer and the date of transmittal. This form, which is of standard 8½"x11" dimensions, is folded in the center by the office of origin with a half-size sheet of carbon paper inserted in the resulting folder. After the original and carbon replicate are completed the folder is divided at the crease and the original copy is forwarded to the office of the rehabilitation agency. In this manner the originating organization retains evidence of its referral and the concise data submitted.

Upon receipt of this referral form VR-20 the local rehabilitation agency immediately acknowledges its having done so by transmitting ADVICE OF ACTION TAKEN Form VR-21 to the office of origin. This form includes

the following information:

> Action taken in case of _____Address____
> You are advised that the case of the above-named disabled individual whom you referred for vocational rehabilitation is at this time in the status indicated below:...

If nothing more than an explanatory letter can be sent to the referred client in a remote locality this factor is so noted on the form and the reason for deferral of immediate (Item 1) action. When one considers that 14 counties in northeastern Colorado are served by a single agent, the necessity for deferred action is patent.

If consideration for immediate service is possible, this fact is recorded in Item 2. Item 3 indicates to the referral agency that the client has been found eligible, considered feasible and that plans for the formulation of a rehabilitation program have been completed.

If a good and sufficient reason for closure exists which can be amply justified, the notation "Closed, reason_____" is made. An habitual drunkard with a qualifying disability might possibly be construed to be infeasible, but cases are rarely considered non-feasible. Where services have been rendered the referral agency is also notified and the type of assistance provided is specified. The signature of the serving agent and his title complete the transmitted facts.

An expedient device for saving precious

clerical time by correspondence was devised from suggestions of the Division of Crippled Children of the Colorado State Department of Public Health. The idea of the local rehabilitation agency transmitting to the Division a completed form, VR-21 4/, for all orthopedically disabled clients avoided the time-consuming process of formal letter writing in requesting case summaries of previous medical consultations contained within their files. The receipt of this form by the Division is construed to be a formal request for a case summary.

For all referred cases which cannot be personally contacted by the rehabilitation agent in the immediate future, Application or Referral for Vocational Rehabilitation form R-2 5/, a standard 8½"x11" page, is mailed with an enclosed letter of explanation requesting the client to return the filled-in form to the local office. Clientele are requested to supply the following information: Sex, date of birth, race, marital status, dependents, citizenship, education, disability (cause of), hospital or doctor by whom treated, present health, needed medical treatment or appliance needed, present job (if any), employer, wage (weekly), satisfaction felt on present job, and if not, the reason, employment

---

4/ See Appendix B for form VR-21.

5/ See Appendix B for form R-2.

history, and if not qualified for a job, vocational choices, date, and signature.

This form is of particular significance in the gathering of data for the handicapped since it is physically impossible to interview actually all referrals within a reasonable span of time. This tool for transmitting facts also possesses another virtue--its receipt by the local agency is prima facie evidence of interest in and desire of the prospective rehabilitant for vocational rehabilitation.

The following forms are of highly significant value in gathering actual data for placement and a knowledge of the subsequently developed background information was vital to intelligent data-gathering.

Form R-1 6/.--For every client brought to the attention of the agency a form entitled R-1 is used. This 8½"x11" folded form which is thereby reduced in size to 8½"x6" is then inserted into a 7"x9" notebook which is the constant companion of the agent in his contacts with clientele and interested parties in the field and elsewhere. Upon this accumulative record of services rendered the client, is tersely recorded the case number, name, address (Directions for locating in considerable detail), telephone number, the name of the doctor, hospital or clinic from which treatment was

---

6/ See Appendix B for form R-1.

received, the source of referral, date of referral, veteran or civilian status, age, sex, race, marital status, dependents, education, dependency status, source of support and amount, brief employment history, original disability, medical diagnosis, involvement, age at disablement, occupational objective, training course, length of training, name of training agency and any other training and length of time.

There is also a section devoted to case load data in which is included a coded status number in addition to a cumulative record of agent contacts with client and members of his or her family. Then too, in this section, is recorded a chronological summary of client performance, the specific factors noted being: attendance, progress, quality of work, cooperation, difficulties and needs. A record of periodic reports, when required, is also kept. The last items on the first page are devoted to closure data, whether closed from a referred status and if so the reason, if closed as employed, a description of the job, the name of employer, weekly wage, or if closed as unemployed, transferral to other agencies, or for other reasons and the reason for these letter type of closures and date of closure.

On the right-hand page facing the reader as he opens this folder are recorded in detail services provided, those purchased and those secured without cost.

These services include under diagnosis and counseling the following and in every case the date provided: Investigation, referral to other agency, guidance and planning, compensatory adjustments, psychological tests, medical examinations, and psychiatric examinations.

The following section is devoted to the analysis of medical services rendered and includes; medical treatment, psychiatric treatment, surgical treatment, dental treatment, other treatment, hospitalization, convalescent home care, physio-therapy, occupational therapy, work therapy, home nurse care, and other.

Under the section devoted to appliances are included: dental, artificial limbs, braces, hearing aid, glasses, artificial eyes, surgical, other and repair of appliances.

The following section on training is subdivided into: educational institution, employment, correspondence--extension, and tutorial.

The miscellaneous category is devoted to: training supplies and materials, transportation for diagnostic purposes, transportation for medical treatment, transportation for training, transportation for placement, maintenance for medical treatment, maintenance while in training, occupational tools and equipment, occupational licenses and fees.

The final classification includes: direct

placement and indirect placement. Incidentally, these forms are alphabetically arranged according to the county of clientele origin which is a practice consistently adhered to for all records.

On the left hand inner side of the folder is kept a record of field notes which is carried over to the last page.

Form VR-1 7/.--This form, four pages of standard 8½"x11" size, is the essence of recorded value insofar as general knowledge of the client and his vocational attributes are concerned. It is known as the "Survey" or the instrument for the interview which may occur whenever and wherever counselor and counselee meet.

As one typically begins to read this form the first item which meets the eye is the blank for "reopened" or "new". This item is of utmost importance in that it reveals whether the client has been rendered service prior to the survey. It also is a point of reference for statistical research. For example, if one desires to know the sum total expended in State and Federal funds, a clue to previously spent encumbrances is furnished by the simple expedient of a check placed in the proper space.

The next item one typically notes is the date

7/ See Appendix B for form VR-1.

of the survey. Here again, an apparently trivial item offers much to the experienced case worker. The date of the survey indicates not only the currency or its lack insofar as pertinent data in the survey are concerned; but it also provides a hint of the environmental interrelationships between the client and society as influenced by economic conditions at the time.

In the upper right hand corner is placed a coded number by which the client is forever after designated. The obvious advantage of anonymity, for which disabled people have a very real passion, is buttressed by convenience of subsequent referral in official correspondence. The value of its usage is also enhanced by its uniqueness. There may easily be, and in fact there have been, two John Jones, but there is only one N-160620 (a fictitious case number for Colorado but an apt illustration of the point at issue).

Directly under this item is designated by the following words the corresponding sections of the State in which the case originates:

Denver--the Denver metropolitan area.

Northern--the northeastern part of the State previously delineated.

Southern--all of that section of the State south of the Northern and east of the Continental divide.

Western--everything west of the Continental divide.

Under the heavy double line near the top of page 1 is placed the name of the client and as one progresses down the left hand side of this page the next item is the address which is given in meticulous detail to facilitate location of the client by the field agent. This is followed by the county in which the client claims residence and his or her telephone number. The referral source and its code follow. The ensuing checks for male and female do not ordinarily provide much of a problem but the hermaphrodite may be difficult to pigeonhole.

The distinction between civilian and merchant seaman, U. S. Civil Employee, and Civilian Defense Service worker is extremely important to the recipient of vocational rehabilitation assistance because one sustaining a qualifying vocational handicap in a legally and Congressionally defined Civilian Defense Service is eligible for unmatched Federal funds for vocational rehabilitation. This provision entitles the recipient to assistance from funds unencumbered by state-matching requirements. The interpretation of this provision, however, is legally strict and applies to the comparative few.

The check placed in the appropriate blank for "White," "Negro," or "Other" is a concession to expediency and is placed there only to facilitate suitable placement for the applicant. In other words, if an employer states that he will not hire a Negro,

sending a Negro client to that employer is no service to the client. The same reasoning is behind the item "Nationality of Origin."

Under "Home-Family" is included the name of the mother and address to facilitate correspondence and to expedite any other matters incidental to employment of the client. Marital status is important because it indicates, among many others, that the client may or may not be able to accept employment or training in places other than his home community. Family members are also significant vocationally for this and other reasons, as are dependents.

The following section is the core around which is constructed the entire profession of rehabilitation. It is therefore rather exhaustively explored.

Physical factors

These attributes are of cardinal importance in the scheme of things concerned with vocational rehabilitation.

The age of the disadvantaged one is of signal import from every conceivable point of view. One must be 16 to be considered eligible for service.

Provided, always, of course, that the minimum age has been reached, the sooner the client is rehabilitated the more assured is one that the occupational restoration will be a satisfactory one. The

exception of the immature adolescent and adult is often meaningless since the immaturity may always be there. In general, the younger client is more plastic and can adjust to circumstances necessitated by accepting employment or training. He is less likely to have family responsibilities which shackle one's economic opportunities for training and employment. The younger the client, also, the more physical stamina he possesses and the more easily he becomes accustomed to prosthesis.

Weight and height are not ordinarily of consequence but in the case of the heavy person with a below-the-knee amputation the heavy pressure on a small bearing surface can be of moment. Notable deficiency in height may militate against chances of employment in certain professions as file clerks.

The place of birth is not ordinarily of importance although foreign-born and out-of-State residents may encounter difficulty in meeting employment requirements for many jobs.

The data of birth has value in correlating data required by cooperating agencies in the field. For example the Division of Crippled Children can do very little for anyone over 21 and adolescents in need of the service offered by this agency must be less than 21 prior to the start of services. Then too, some concerns in the past would not hire anyone less than 21 years old nor over 35.

Citizenship status must often be proven for employment, for hospitalization assistance, for relief aid, and for many other reasons. Insofar as the local vocational rehabilitation agency is concerned a minimum residence requirement of one year is established. For students in college, residence while attending an institution does not ordinarily constitute legal residence.

The physical disability is by definition the crux of the entire program and is the central theme around which the procedures of operation have been formulated. Its detailed description is therefore a "must."

Volumes have been written on this subject but for the sake of brevity the following discussion will perhaps suffice.

For the sake of convenience in this discourse the infinite variety of these disabilities were arbitrarily grouped on the check sheet 8/ into visual, auditory, cardiac, tuberculous, orthopedic, diabetic, emotionally disturbed, mentally subnormal and miscellaneous. To avoid duplication of the discussion presented in review of literature pertaining to this feature of the data-gathering instrument known as the "Survey" only considerations of actual cases investigated by the

---

8/ See Appendix A for copy of Master Sheet.

counselor will be noted.

The totally blind are assigned to another state agency and consequently are of no professional concern to the agent. The exact loss of visual acuity or peripheral vision which qualifies one for assistance is wisely left to the composite judgment of the examining physician, the specialist involved, the counsel or the supervisor of physical restoration and the medical consultant. The establishment of hard and fast rules would add the yoke of inflexibility to other restrictions imposed upon the profession of vocational rehabilitation. Such regulations might also impose a decided injustice to the unusual case with extenuating circumstances. The concensus of common sense opinions based on long experience and pooling of matured judgment is perhaps as infallible a measure as can be humanly devised to determine the vocational significance of any impairment. The raw data secured by observation methods may be atypically procured in the following manner:--An agent noting a man holding a newspaper very near his face as he reads. A more detailed discourse on this particular impairment will be presented under the discussion of Form VR:PR:3c 9/.

Much of the same reasoning presented above applies to auditory disabilities. Since a rather replete

---

9/ See Appendix B for form VR:PR:3c.

presentation of the subject was included in the review of literature, particulars need not here be discussed. If additional information is desired the subject under the heading of Form R-3d 10/ should suffice.

The cardiac is representative of a large segment of population of the nation and they are in many ways set apart from their disabled brethren. Theirs is in contrast to the problem of their orthopedically disadvantaged peers primarily a physical one. By this statement is meant that society is not apperceptively conscious of their deviation from the normal and consequently they are invulnerable to the social stigmatism to which the visibly disabled are often subject. The solution of this difficulty is essentially a matter of intelligent regulation of activity. For a more exhaustive discussion of this disability the reader should refer to the subject under review of literature or the discourse under the heading Form R-3b 11/. One final word on this matter--certain sections of northeastern Colorado have been spasmodically stricken with rheumatic fever at various times with its incurred aftermath--heart trouble. In this connection a word of caution to the youthful cardiac is certainly in order. The wonderful ambition and the

---

10/ See Appendix B for form R-3d.

11/ See Appendix B for form R-3b.

resilient qualities of the young may tempt one to overdo with disasterous results.

Much of what has been given above applies to the tuberculous and further information can similarly be found in the review of literature and the presentation to come under the sub-heading Form R-3a 12/. The remarks of Dr. Kessler, cineplastic surgeon and orthopedic specialist of international fame, in the review of literature are most certainly worth re-reading. Insofar as Colorado is concerned poliomyelitis epidemics of recent years have taken a dreadful toll among the flower of its youth. This strangely mysterious malady apparently strikes when and where it will. Its victims were perhaps the largest group of the orthopedically impaired brought to the attention of the Vocational Rehabilitation Service through the last decade. Sufferers of cerebral palsy constitute another statistically significant group. A more detailed discussion of this type of disability will be presented under the section Form R-3e 13/.

Diabetes, on the contrary, is often encountered in elderly people and those in early middle age, and the temptation of sugar and sweets is one which the diabetic

---

12/ See Appendix B for form R-3a.

13/ See Appendix B for form R-3e.

must always resist. Drinking, too, is particularly harmful and must be avoided at all costs. The feature of this affliction which must constantly be kept in mind by the agent is the possibility of coma despite treatment. For the emotionally disturbed the services of a psychiatrist are required if the disturbance is serious enough in import to qualify its possessor as vocationally handicapped. The subjective nature of this ailment and the need for highly specialized training precludes diagnosis and treatment by the counselor except as advised by the consulting psychiatrist.

Under the alcove "catchall" of miscellaneous was grouped all other disabilities which could not be pigeonholed above.

The item "age when disabled" is of significance as was implied above in the discussion of the item "age." Further comment was considered unnecessary at this time.

The "extent of disability" is an effort to indicate the vocational significance of the impairment. A permanently damaged back, for example, could be a serious bar to employment if the employment for which the client was qualified required heavy manual exertion. If, on the contrary, a sedentary position is available for one, the damaged faculty may be occupationally trivial.

The origin of the disability is of value to the counselor gathering data for placement and training. If the accident is incurred by disease, the possibility

of a recurrence may need to be watched. In arthritis, the assurance of quiescence is essential, prior to the inception of a training program or engagement in employment.

The origin of the disability if accidental in nature is worthy of study. If, for example, the client happens to be one of those rare individuals to whom accidents seem to occur repeatedly, he may need retraining in an entirely different line of work.

The section devoted to "Other Defects" often contains items of value to the counselor. For, in addition to the presumed major deficiency, other impairments may exist which are of far more import than that assumed by the client. The counselee may feel that his major disability is severe asthma while he may also have a chronically damaged heart. Or, even though the asthma might possibly be construed to be the major impairment the heart condition can also be extremely serious. And no placement which did not include provision for both disabilities could be deemed proper. The same considerations would apply to "general health."

Under "Prosthetic Appliances" are checked the items "Used" and "Needed" as well as "Condition." Here one may be wearing a satisfactory artificial leg but he may also need a back brace or the one he is wearing may be of no practical value to him. Or, the appliance may be worn out and the counselee not realize the reason for

its malfunction. Or, a hearing aid, for instance, may remain in excellent condition for years but its construction design may have been outmoded and it may function very imperfectly compared with ultra-modern instruments which by now have achieved wonderful acoustical efficiency.

The "Treatment for Disability" section in the upper left hand corner of page two is an invaluable referral source for additional information. The human frailties of mankind are also traits of the impaired and oblivion of painful past events, perhaps unconsciously desired, often erases memories or blurs recollections of past experiences. The date upon which the doctor was last seen or the time of departure from the hospital is often helpful in rendering services to the client. By dating the treatment indications of its type may be revealed and such information may be of signal import to the medical consultant reviewing the case history.

"Economic Factors" are, of course, always of moment. Since the essence of vocational civilization is the dollar it simply cannot be ignored. The source of support is frequently a determining influence on the type of job training which is financially possible. If it is wages solely, any training which interrupts that employment may need to include living expenses for the client. If the source of support is savings the length of gratis time served in training may need be paced by

the amount of savings available if no other source of support is found.

If the source of support is family, family relations and home conditions may need investigation. If the counselee must work eight hours a day at home for his support he may not be in a condition to go in job training an additional eight hours daily.

If the source of support is unemployment compensation, the counselee accepting additional employment needs to have prior approval from the appropriate compensation commission. If he or she is the beneficiary of an "Insurance" permanent disability pension legal prudence must be exercised in accepting remunerative employment.

If the source of support is public, or, in some cases, private relief, it is essential that the relief agency know of the training program as it can be very helpful--or very much the opposite. Here cooperation between service agencies and the client is a "must."

Data regarding "Home" status may also have a bearing on the situation. If an owner, the value of the home is of moment in determining legal eligibility for service. If a buyer, the value of the property and the mortgage attached are similarly useful. If a renter, the amount of rent paid contributes to a clearer understanding of possible financial assistance needed. The

same reasoning holds true for a roomer. These data are also of professional interest to the counselor in seeking placement and employment opportunities elsewhere. Can the client leave his community? If so, what provisions for disposal of property must be made?

The possession of an "Auto," its "Make" and "Year" are also tools to get the job of getting a job for the client done. If he or she has a car new vistas of employment opportunities expand into an otherwise unrevealed panorama of job possibilities. Taxi service, delivery service, sales work and other travelling positions are among these. As the manager of a large chain grocery once told the agent, he feels more confidence in the delivery man whose services he engages if that man uses his own car or truck. This employer felt that the employee using his own car would be more careful with it and that he was more financially responsible.

"Other Property" includes equipment, farm land, garages, machinery, etc. and its occupational significance is rather obvious.

Under "Compensation Information" is compiled data relevant to the case of John _____ above.

The top of the upper right hand column on page two is headed by "Employment History" and the entire column is devoted to this subject. The necessity for its inclusion requires no justification.

The upper left hand corner of page three is entitled "Educational Factors" and the item is emerging into its own as a vital factor. More and more employers are requiring a high school diploma as a prerequisite for engagement of labor. Where the applicant plans to matriculate at an institution of higher learning the location of the school assumes value. If the high school attended is known to be of low educational rating, the fact that the student is a valedictorian in a graduating class of 10 or 12 may be meaningless. He may be good college material or he may not be. Where standardized aptitude tests of known quality are given a more definitive opinion can, of course, be formed. The "age" at the time of the last year in training indicates, in some measure, the native intelligence of an older man or woman seeking rehabilitation assistance. Illness of course enters in the picture, but if the impairment was subsequently incurred, it does not.

"Other Training" may help direct efforts to find suitable placement. Suppose an equipment operator lost a leg and was consequently barred from this profession. If he had taken training say, for two years as a watchmaker and then dropped it for a more adventurous endeavor he might be able to resume his training and soon become suitably employed. The time lapse between the termination of training and the present is also worthy of note. If a highly skilled trade was learned in late

childhood or adolescence and not thereafter practiced, the middle aged man with such training would be ill-equipped to compete with a skilled artisan.

Under "Vocational Factors" are included the fundamental primary choice of the client and his second, if any; the reason for such selection; his or her hobbies; aptitudes; faculties for dealing with people, things and ideas; preparation contemplated for the job, and nature of such preparation. In this section, rehabilitation agents have long respected the practical application of the Rogerian client-centered concept of counseling. Where testing facilities are available, various aptitude, achievement, interest, and miscellaneous tests may be given if desired.

The section "Application for Job" which heads the right hand column on page three is a practical device or tool used as a mechanical aid in proper placement of the disabled. It is also a reminder of the need to cooperate with the Colorado Employment Service, an affiliate of the United States Employment Service.

"References" are for the usual purpose of having written evidence of the opinion of familiars concerning the qualities and faults of the client. They also furnish a list to whom prospective employers can write.

"Affiliations," including lodges, churches, unions, and others provide additional data which are

sometimes helpful in providing suitable employment.

The left hand column of "Interviewer's Impressions" is devoted to subjective data and their relevance is commensurate with the judgment and experience of the interviewer.

Practical material consisting of medical information and training costs comprise the right hand column on page four and their further description at this point is believed unnecessary other than to state that every rehabilitant must have a general medical examination prior to acceptance by the service agency.

The usual topic "Comments" covers about half of page four and is unquestionably of worth. The form is completed with a check for the place in which the interview occurs and the signature of the interviewer.

At the time of the interview several other data-gathering forms are used, one of which is the financial statement.

The Financial Status of Applicant," Form VR-4 14/, of standard 8½" x 11" size, is an instrument designed to facilitate the agent in determining the eligibility of a client for the service desired. By Congressional mandate financial need is a prerequisite for medical treatment, remedial surgery, hospitalization, prosthesis, transportation, maintenance, tools and equipment purchased. In contrast to the need for these

---

14/ See Appendix B for form VR-4.

services, Congress has seen fit to permit the rendering of assistance for tuition, counseling, placement, medical examinations and related services irrespective of the monetary circumstances of the client. This distinction of fiscal policy between the two categories of rendered services led to the formulation of the procedure for gathering financial data. The form, incidentally, also enables one to compile information of this sort for other purposes. As are all forms designed by the vocational rehabilitation agency serving Colorado, it is a refinement of technique for more detailed collection of data sought in the VR-1, the "Survey"--the basic elemental tool.

The questions of present employment indicate, from a fiscal point of view only, the suitability of the present job. Bank statements and those treating the possession of real property and indebtedness are primarily for eligibility requirements, although here again the quest for elaboration of information compiled on the "Survey" is of great practical value. The desire of the agency for data relevant to compensation is also dual in nature. In addition to this dual nature, the hospitalization and prosthesis, surgical treatment and remedial medicine, necessitate a rather replete report concerning insurance of various sorts, including health and accident, Blue Cross, and other.

Where an expensive operation is necessary,

for instance, prudence may dictate a limit to the amount to be spent on a particular client, since after all the agency is operating on a limited budget. But by pooling the resources of the client with those of the service organization a satisfactory arrangement may emerge.

Questions relevant to recipiency of public assistance, other assistance, other income and earnings of the family are based on the same vein of reasoning delineated in the immediately preceding paragraphs of this section.

The counselee then signs the form which includes a final statement "If my financial status should change at any time while accepting services from the Rehabilitation Division (of the Colorado State Board for Vocational Education) of the State of Colorado, I will notify the Rehabilitation Division at once."

In the event the counselee is under 21, the signature of the parent or guardian must also be obtained. All the information compiled on this form is sworn on oath before a Notary Public.

"Permission to release medical information" statement, $8\frac{1}{2}$" x $5\frac{1}{2}$", was designed to protect the agency in releasing medical data to duly authorized persons. Consulting doctors and medical consultants must have a frank and complete record of physical attributes to make

various decisions concerning eligibility, feasibility for rehabilitation, and to formulate procedures for medical care, surgical treatment, hospitalization and allied programs. This statement is signed in duplicate to expedite official correspondence and communications to duly authorized persons.

Upon completion of the interview the following form General Basic Medical Examination Record, R-3 15/, is transmitted by the counselee to the local doctor of his choice for recording the results of the examination (which incidentally is paid for by the agency). It is unnecessary to add to the statement stamped in the upper left hand corner, "This record is CONFIDENTIAL."

General Basic Medical Examination Record, form R-3 16/, is compiled as a single 8" x 10½" report. The coded file number is of little importance to this discussion. In the upper right hand corner of the report is a statement, "Please Send Report To" and an appropriate blank. After the doctor has completed his examination including a serological test, the report with an accompanying bill is transmitted to the office of issue. In this connection an unavoidable delay is involved as a general rule. Since most doctors do not have laboratory facilities to conduct serological tests,

---

15/ See Appendix B for form R-3.

16/ See Appendix B for form R-3.

a sample of blood is usually withdrawn from the client and mailed to the appropriate testing laboratory. The doctor in the meantime has completed the examination and has bid adieu to the client. He then retains the report until he receives a record of the results of the serological test. Upon receipt of these results he records them on form R-3 and then transmits to the local rehabilitation agency the completed form along with his bill.

Prior to this action, however, the rehabilitation agent has recorded preliminary information down to the heavy double line on the face of the report. It is believed that this preliminary section of the form is self-explanatory and no comment other than the space provided for "Patient's statements of disabilities" is presented. This item may attract the attention of the reader because it gives official expression of the opinion of the counselee regarding his impairment. And when compared with the diagnosis of the examining physician may yield clues to the counselor, the supervisor of physical restoration, the medical consultant, and the specialist who may come into the situation at a later date.

The confidential nature of the report would be safeguarded in two ways other than the protection provided in the extreme caution exercised by the agency. If, through some mishap the report fell into the hands

of an unauthorized person, his lack of medical lore and unfamiliarity with medical terminology would prove a formidable barrier to his interpretation of the recorded data. But the unfathomable writing of the average doctor would be the most difficult barrier of all. It is difficult to translate by a skilled expert who has an inkling of the situation from years of experience. So, in all seriousness, the report is definitely confidential.

Volumes could be written on this report and its vocational implications but the features of primarily germane general interest in this study are provided on the blank following "DIAGNOSIS" on the reverse side of the form. Here the examining physician indicates not only the major but also the minor impairments, along with any comment he feels is appropriate. The section immediately following "Characteristics of Major Disability" is of moment in the determination of eligibility and feasibility of the counselee for service from the agency. The disability must be a vocational handicap, but it must also be of a relatively static nature and permanent in duration. There can be no question that one suffering from acute appendicitis is incapable of working during an attack. The emergency nature of this malady, however, would probably preclude its being covered by the purposes of the Congressional Act. If the disability is rapidly progressive, as in

the case of certain advanced stages of cancer, one might certainly be unemployable but the feasibility of rehabilitation would probably be nil.

The item "Can the Major Disability be Removed by Treatment" is worthy of comment. Its complete removal might remove its possessor from the rolls of the handicapped. One with an operable hernia may in this manner be made whole again. Or it may be "Substantially Reduced By Treatment." G. B. had poliomyelitis as a boy many years ago and his feet were seriously weakened by the inexplicable malady. As a young man he was trained through the rehabilitation agency to become a skilled tire vulcanizer. However, with advancing age one of his defective feet began to cause acute discomfort. Standing on a concrete floor eight to 10 hours a day, month after month, does not contribute to the comfort of anyone and in his case it eventually became unbearable. The rehabilitation agency cooperated with a philanthropic concern devoted to the welfare of "polio" victims and with the consent and eager approval of the client below the knee amputation of the impaired member was consummated. This patient illustrates the necessity of considering, always, the entire physical attributes of an individual before proceding with any action. In the formulation of plans for amputation, the fact that the counselee was a small man of light physique was deemed a favorable omen for ultimate

success of the physical restoration. Below-the-knee amputations, while advantageous in many respects, are also hazardous in others. The fact that a man with a heavy body would exert tremendous pressure on the unavoidably small bearing surface between a below-the-knee stump area and its prosthesis is something to remember.

Other features of the report have been, and will be, discussed elsewhere in this treatise.

One final section, however, the "Recommendations," was deemed of general interest and deserving of comment. It is here that the medical consultant and the supervisor of physical restoration receive from an authoritative source their initial inkling--an official datum for the formulation of the objectives of their program of suggestions of the desirability of specific medical consultations by a reputable specialist as well as the feasibility and selective decisions of future courses of action.

Under the sub-title "Hospitalization" the recommending physician must estimate the approximate duration as well as the reasons for his suggestion. This is desirable to implement a reasonably consistent and previously contemplated fiscal procedure. After all, no agency can expend a sum much in excess of that stipulated by appropriate legislative action. The same causal considerations hold for similar requests in the

item designated "Treatment."

It may be remarked in passing that the physician who affixes his signature over its typewritten counterpart eases the task of future correspondence by the agency with reference to this "report."

Chronologically speaking, the next step of the vocational rehabilitation process in rendering a complete service to its clientele is the orthopedic consultation, special cardiac investigation, or whatever diagnostic procedure is recommended. A detailed description of these specific ailments follow under the side-headings of the pertinent forms. These forms are later filled out by specialists through arrangements with the client by the supervisor of physical restoration with the advice of the medical consultant.

Medical Report--Pulmonary Tuberculosis, Form R-3a 17/, is contained within the customary size paper, that is, 8½" x 11". This buff-colored form was designed by the District of Columbia Rehabilitation Service but is now used rather widely throughout the United States.

An indication of the thought and experience with which this form was designed is present in the phrase "To Sanatorium, Clinic, or Physician." It is also evidence of the relative import of the sanatorium in the treatment of the tuberculous.

17/ See Appendix B for Form R-3a.

The periodically recurrent nature of the malady is given tacit recognition in the cumulative reverse chronological record of past admissions and discharges. A clinically valuable device is the type of discharge. "With consent" is satisfactorily acceptable. "Without consent" implies not infrequently a patient with whom remedial workers may experience difficulty in applying a regimen. The very word "Disciplinary" discharged carries its own unsavory imputations and certainly does attract the unfavorable attention of the examining physician.

Other data presented in this section may require medical terminology beyond the capacity of the layman to appropriately describe or to intelligently understand.

Similarly in section II, such terms as collapse therapy, pneumothorax, pneumolysis, phrenic-temporary and stage number of thoracoplasty carry only vague connotations of meaning to one not deeply versed in medical lore. It is far better for the neophytic student of the affairs of the tuberculous to frankly admit his or her inability to grasp the precise shades of meaning and seek interpretative assistance from the specialist. The medical expert, himself, does not hesitate to ask the opinion of the doctor previously having treated the patient.

Under section III (Present Status of Patient)

which is predicated on the basis of the last examination, the patient who has not had a clinical examination in over three months should be reexamined. Sputum tests are also recorded as indicators of present status. The adequacy of the present status in every case is dependent upon its duration. It is of interest to note the phrase "Lesions apparently healed." The insidious nature of the disease and often inexplicable recurrences have taught a bitter lesson to the pompous, and dogmatic practitioner who would authoritatively express his opinion of present status as immutable. The phrase "apparently arrested" again appears attesting sensible caution in prognosis.

One other invaluable item on the blank, Item number nine, is the provision for follow-up. This anticipation of future care following discharge is only sensible insurance against later admission to the hospital or sanatorium. The futility of prolonged expensive treatments to bring the malady under control and then to have to start all over again as a result of failure of inexpensive follow-up is readily recognized by modern institutions of today. Welfare agencies jointly interested in such clients also make it their very especial business to compulsively encourage released clients to formulate and carry out cooperative follow-up procedures with the designated physician.

While the rehabilitation agent is intensely

concerned with the present and past clinical status of the patient his professional interest does not officially emerge until item 10 on the reverse side is reached. Factors previously mentioned are, in essence, the province of the clinical worker, but from item 10 onward his professional interest is sharply whetted by such items as:

> "Previous occupation," "Characteristics of the Job," "Advisability of patient's return to this Job," "Proposed employment objective," "Characteristics of Job," "Feasibility of this Job from a physical standpoint," "Would it be inadvisable for other than physical reasons," "Recommended schedule for training and placement: Full-time schedule?_____Part-time _____If part-time, number of hours per day recommended?_____Number of weeks to work up to full-time schedule?_____".

Here plans for the graduated process of slowly increasing the work tolerance of the arrested tuberculous under skilled supervision are formulated.

The section "PROGNOSIS" which is composed of subjective data, is nonetheless predicated upon the results of objective tests, examinations, X-rays, sputum tests and their interpretation by the most skillful practitioners the world knows--the specialist in his field and the one who, above all others, knows his particular patient best, the private physician.

Insofar as northeastern Colorado is concerned "Full-time, acceptable conditions" pertain more generally than "Full-time, sheltered conditions." The latter simply do not exist in appreciable numbers in this area.

MEDICAL REPORT--Cardiac Disability, Form R-3b 18/.--The information contained in this form is recorded on the customary four page 8½" x 11" report.

Here, as above, the order in which the salutation "To Physician, Hospital, or Clinic" is reminiscent of experiences encountered over the years by the designer of the form. The physician is typically the initial point of contact by the client with medical authority. Since this is understandably so, this practitioner is in a remedially envious position, early treatment being by far the most effective treatment. In this introductory section the statement "All information will be held strictly confidential" is notable (the italics are those of the writer). Thus, the counselee is again officially assured in black and white (or rather black and green since the form is of a greenish hue) that he may confer freely with the cardiac specialist without fear of betrayed confidences; which is a most important point - the unrestrained exchange of relevant views for treatment and its compatibility with normal living.

Insofar as the usage of technical information is concerned its interpretation by one skilled in medical and cardiac terminology is considered vital for lay discussion. The necessity for consultation to

---

18/ See Appendix B for Form R-3b.

intelligent understanding of the case at hand precludes any attempt to present here a discourse on professional terms used. To delve headlong into an intricate linguistic problem without years of careful preparation would be the rankest of folly. However, where incontestibly clarified terms of commonplace incidence in the everyday world are resorted to, the rehabilitation agent has a right to, and indeed, a duty to, study and utilize findings which were, after all, prepared specifically for his assistance in formulating final plans for the vocational rehabilitation of the considered client.

The "Cause" of the effected condition may have been congenital, subsequently incurred disease, or perhaps of unknown origin. The "Date of onset" and the length of lapsed time between this date and initial corrective efforts may determine the gravity of the ailment.

Under the major category "DIAGNOSIS" the subsidiary statement of item 4, "Normal for patient's age: Systolic___Diastolic____" may be of intelligible value to the experienced agent.

Item 5 "If arteriosclerosis is present in present stage (check): Moderate____Advanced___Far Advanced___" provides a clue to the thoughtful agent who is occasionally given to introspection. Even the callow worker in the field should receive a comfortingly concrete basis for formulating an opinion by the qualify-

ing phrase preceding the blank filled in by the cardiologist. "Far advanced" surely connotates to such a one that the counselee is in a condition conducive to fatality under strenuous vocational conditions. For this patient death is always so near as to be nearly a tangible entity and its proximity must never be ignored in formulating the occupational objectives of any program for the cardiacs.

Similarly, item 6, "Characteristics of heart condition (check): Stable___Progressive___Improving ___Recurrent___Permanent___" has significant rehabilitational implications. If the client is presently engaged in a suitable profession, for instance, probably no vocational change is necessary other than the imposition of a sensible regime. Here, as in all cardiac cases the regulation of activity holds the salient position in the program of treatment. Since this is so entirely a component of the personal life of the patient the sine qua non of establishing rapport between the counselee and his physician is evident. This is particularly so in the democracy of America with its tradition of free choice--in a democracy everyone has a right to fail if he or she so desires. Here again, as always, like a recurrent theme, the value of the Rogerian concept of client-centered counseling is repeatedly stressed as the singularly effective tool of psychotherapy and its use hereby enhances the value of advisory

action for the heart sufferer.

Although the functioning of a defective heart may be improved by treatment (Item 7) in some cases, generally the ailment is chronic in nature and consequently immutable.

The question of longevity (b) under "PROGNOSIS" on page two is one of extremely practical value insofar as rehabilitational feasibility is concerned. One could scarcely expect official approval of the expenditure of the precious dollars of meager funds for a prolonged training program for one with a life expectancy of a few brief years.

Item (e) "As to work capacity (in a moderately active job)--" "With treatment _____" "Without treatment _____" is obviously of moment.

Section III "PRESENT EMPLOYABILITY" is, of course, directly applicable to vocational rehabilitation and the information herein contained under subdivision "1. Functional capacity and therapeutic classification _____" is predicated upon the American Heart Association standards for examination and classification.

Item "3. Could patient now safely be placed in training (for employment) on a full-time schedule?___ _____Part-time?_____Number of hours per day recommended_____" constitutes a table of commandments for the successful agent in dealing with

cardiological rehabilitation as do the items under "4. Precautions to be taken as to--

(a) Types of activity to be avoided_____

(b) Working conditions to be avoided_____

(c) Is medical check-up necessary_____

If so, how often_____

The section "IV. OTHER DEFECTS:

1. Does patient, to his or your knowledge, have any defect of--

Vision_____Hearing_____Limbs or Spine _____Lungs_____Circulatory System_____ _____Digestive System_____Genito-urinary region___ _____Suggestions as to further examination or treatment of defects_____

2. Has patient any symptoms of mental or emotional abnormality_____If so, describe briefly_____" is patently essential to proper training and placement. The secondary defect may in itself constitute a vocational handicap and the dual causal nature of the resultant occupational impairment is the epitome of formulation for procedures of ultimate rehabilitation.

Without the section "V. RECOMMENDATIONS:

_____"

the form would be practically meaningless to the agent with his fragmentary knowledge of medical lore and might, indeed, be a source of disaster to the counseled client.

Page three of the form is devoted to "FUNCTIONAL CAPACITY AND THERAPEUTIC CLASSIFICATION" which is an interpretative "must" for the assimilation of the recorded data of the form.

Exemplification of "ILLUSTRATIVE TYPES OF ACTIVITY" is presented on the final page of the form and is a helpful device in working out with the practitioner and the client, fitting vocations.

MEDICAL REPORT--VISUAL DISABILITY, Form VR:PR:3c 19/, a standard 8½" x 11" report of bluish hue, was particularly designed for the Office of Vocational Rehabilitation and this purposive design is reflected in the very first item "To examiner: Please send completed report to_____." This report is of great worth to the neophytic data gatherer of visual impairments. Its interpretative value to the embryonic agent is, in essence, contained on the third page under the section "TABLES AND CHARTS." It is invaluable, also, to the "old China hand" who over the years has sailed the seven seas of experience, for progressively scaled percentage losses of visual acuity and efficiency as measured by Snellen Notations on the A.M.A. Chart at 20 feet and by the 14 inch Snellen Notations on the A.M.A. card in addition to the Test on the Jaeger Card.

Also included is a "Table of Loss in Binocular

19/ See Appendix B for Form VR:PR:3c.

Vision (Motor-Field Efficiency)" wherein measured losses are recorded in regressive percentages. Appropriately corresponding charts are designed on the final page of the form.

The meticulously recorded data on the first and second pages are presented without comment other than some rather general observations pertinent to such gathered data. Visual acuity without peripheral vision when superficially observed may lead the unapperceptive agent into a conviction that the disability is vocationally trivial.

Where extreme corrective measures are used, the corrected vision may be near normal but if the profession into which the counseled one wishes to enter occasionally requires the use of uncorrected vision that fact may preclude occupational entry. In jobs requiring violent physical activity there may be a danger of fracturing glasses. Where rapid changes in humidity constantly occur the use of glasses may be impracticable.

Where occupational conditions contribute to the impairment, the job may need to be engineered or re-designed to eliminate the causal agent. Where this is out of the question a change in the performance of duties may be feasible. Or, the profession in which one is engaged may need to be changed.

The stability of the impairment is, as always, a most important consideration, one aspect of which is

naturally prognosis. Rapid regression toward blindness may necessitate preparation for a job in which sight is not essential. Color-blindness, which afflicts men so singularly, is of import in certain jobs, such as traffic officers and certain railroad employees.

Communicable eye disease indicates prudence regarding possible means of contagion in placement.

It may be of interest to note that in Colorado the affairs of the blind are not handled by the Vocational Rehabilitation Division of the Colorado State Board for Vocational Education, but are delegated to another State agency.

MEDICAL REPORT--Hearing Disability, Form R-3d 20/,--This form is printed on the typical 8½" x 11" double page and is of a dull orange hue.

The counseling person is particularly interested in item "1. Age of applicant____years." which includes the factor of senile decay or the aging process. "Occupation" can also be of concern, particularly where acoustical apperception is an unavoidable factor in the occupation. Length of lapsed time (Item 2) between onset of the disability and the present time will influence acoustical intelligence if speech has been apperceptively unintelligible to the afflicted for a prolonged period.

The manner in which the ailment originated (Item 3) informs the data-gatherer much. Was catarrh or sinus-

---

20/ See Appendix B for Form R-3d.

incited difficulty instrumental in the loss of function of Eustachian tubes? Or could it be directly attributable to a specific injury?

Item "4. Has hearing been better, worse, or unchanged in the past 6 months?_____ In the past two years?_____" reveals a suggestion of its present state of regression.

Contributory causes of the hard-of-hearing state may be given in item "5. Is hearing worse at some times than at others?_____If so, under what conditions_____" and if the causes can be proven to be indigenous to the vocational environment of the client, appropriate changes in the occupation or a change of pisitions may be desirable.

"6. Are there any other members of the family hard of hearing, or deaf?_____ If so, who?_____" contains much grist for the intellectual mill of the counselor. Older members with complete loss of hearing if congenitally incurred add to the hypostasis of poor prognosis.

The adaptibility of a hearing aid may be involved in the answer to question "7. Can applicant hear over telephone?_____."

Other suggestions come to mind in reviewing answers to question eight which treats of noises of environment and directional apperceptiveness of sound. Here the examiner also probes for evidences of vertigo.

Item "9. Has applicant--

a. Ever used a hearing aid?_____When?_____
Successfully or unsuccessfully?_____

b. Ever lost a job, failed to get a job, or had to change jobs because of hearing condition?_____
If so, explain_____"

may contribute information not only for acoustical adaptibility of hearing aid but also willingness to use the instrument without fail. One who will not take advantage of an applicance irrespective of his ability to use it uses poor judgment in purchasing one and so does the counselor who recommends such an investment.

Item "c. Had training in lip reading?_____"... including "Ability to read lips_____," when affirmatively answered, suggests promising adaptability to an aid for the otherwise acoustically hopeless. No doubt the reader is familiar with cases of the totally deaf who were such polished masters of lip reading that speaking to their backs was the first inkling of the inability to hear.

The body of reviewed studies in the previous chapter should be re-read for an adequate conception of the data-gathered and its method under section "II. EXAMINATION AND DIAGNOSIS" on page two.

Item "c. From examiner's experience with patient, at about what distance can patient hear and understand normal conversational voice?_____ft." is,

however, an interesting commentary on the value of ability to understand heard noise and acoustical apperceptiveness within the tonal frequency of the human voice. Recipience of gross sound and the intelligent grasping of that sound are two somewhat independent faculties.

Item "d. Is patient's voice affected?_____.." is a striking evidence of failing auditory facility. The inability to hear his voice is manifest among the significantly hard of hearing.

The causal syphilitic agent is sought in the blank, item 2, at the top of page three and is one of the reasons every prospective rehabilitant must be given a serological test prior to the rendering of service.

"DIAGNOSIS" concerning the "Pathology of the hearing mechanism" contains much useful information. Neural deafness (or more properly speaking, hard of hearing) is of grave portent since its faulty mechanism cannot presently be repaired, and when loss from nerve impairment is complete there are no known sources of aid to which one can turn for succor.

Under section "III. PROGNOSIS AND RECOMMENDATIONS" item "3. Is hearing aid recommended?_____ If so, suggestions as to type and specifications_____ is an attempt to match specific auditory lossess with appropriate instruments. The rapid advance of electronics during World War II has added propulsive acceleration to the developmental progress of this mechanical device and

familiarity with ultra-modern aids may enable the counselor and others interested to offer new hope for those previously beyond treatment by mechanical aid.

The remainder of this section is devoted to physiological and environmental aspects of rehabilitation. The final standard form widely applied in the medical phase of vocational rehabilitation follows.

"MEDICAL REPORT--Orthopedic and Miscellaneous Disabilities," Form R-3e 21/.--For many years the services of the Office of Vocational Rehabilitation were predominately devoted to the interests of the orthopedically impaired and, even today, this segment of the disabled is a statistically significant one.

The highly individual nature of these impairments defies coding and other means of simplified designations. Here, perhaps more than in any other area of the professional field in which the agent functions, physical differences are strikingly manifest. This consideration which emerged from the difficulty of gathering and compiling data entailed the devotion of considerable space to "a. Description as to nature and condition_____..." "b. Cause of disability_____Date of onset_____" often provides the impetus for official action from certain

---

21/ See Appendix B for Form R-3e.

quarters. Those who were stricken with poliomyelitis are eligible for possible assistance from "The National Foundation for Infantile Paralysis" which has been financially responsible for many of the wonderful applied operative techniques devised by cineplastic and orthopedic surgeons in the last decade.

Since much of the discourse on other forms applies to (c) and (d) under I these are presented without comment.

Item "c. Degree of residual functioning of part affected (check): Good___Fair___Poor____Very Poor__ __None___" means a great deal to those who officially attempt to comply with the wishes of the client when such desires are within considered reason. Should the examining specialist decide that the amputation of the affected member with accompanying prosthesis to be advisable, his decision would be contingent, in a large measure, upon the degree of residual function of the impaired limb. It has been the experience of the counselor that disabled legs may be much more satisfactorily replaced by prosthesis than impaired arms. In this area of endeavor the agent should keep abreast of current developments as amazing advances in the art are being "conjured" out of the imagination of the introspective designer. The possibility of the genesis of the "hydraulic leg" with fluid control of the prosthetic knee-joint may be just around the corner.

The section "II. PROGNOSIS_____..." with and without treatment presents space for observation of conditions as modified by physiotherapy and which came into the popular literature through the widespread incidence of "polio," an enigmatic malady whose inexplicable means of transmission prevented its confinement to local areas. In this connection the date of onset determines, in a sense, the justification for prognostic opinion. Ordinarily, the affected muscle which does not respond to physiotherapeutic treatment within the initial two years, forever after is beyond improvement in function. Through continuous massage and allied treatment such an afflicted muscle may possible retain its undamaged appearance but the original motive power is gone forever. With the conclusion of therapy the muscle then wastes away to the state to which it would have regressed without treatment.

Congenital physical abnormalities, particularly club feet, have responded to operative techniques with signal success especially when the surgery is completed in early youth. The "locked knee" can often be straightened and stiffened which adds much to its functional utility. Although the knee joint may be immobile in flexure, the leg has weight-bearing capacity, and when used in conjunction with its unweakened mate, permits considerable ambulatory movement.

Section "IV. CONDITION OF THE FOLLOWING--

Secondary to major disability (rate without diagnosis is Good, Fair, Poor, Very poor)--

(a) Vision_____ (b) Hearing_____ (c) Heart_____

(d) Lungs_____ (e) Circulatory system_____

(f) Digestive system_____ (g) Genito-urinary region__

Has patient any symptoms of mental or emotional abnormality?_____If so, describe_____Wassermann report--if secured_____Recommendations as to further examination, or treatment for any of these conditions_____" exemplifies the laudable trend to record and compile the multiple disabilities often found among the impaired.

Section "VI. RECOMMENDATIONS:_____..." is the concluding section and as is invariably the case, is conducive for the recording of facts uniquely germane to this one individual.

In addition to these forms other special reports concerning special cases may be transmitted to the local rehabilitation agency at opportune times. These reports may be standardized forms from cooperating agencies but their atypicality relevant to the point at issue does not justify their inclusion in the appendix of this treatise.

Where medical consultations, as described above, indicate the need for physical restoration, the supervisor of physical restoration really steps into the vocational picture. It is through his cooperation that a request for encumbrance of funds to ameliorate or

eliminate the disability of the client is made possible. The process of encumbering funds is not germane to the actual data-gathering nor is it directly relevant to the problem of the treatise and it is consequently not described in further detail, other than to state forms VR-13a, 13b, and 13c 22/, which summarize concisely factual data concerning the client and proposed service accompany the transmittal of the encumbrance to the central office. Once the funds are encumbered, however, a contract for the services to be rendered is negotiated between the agency and the firm, organization, or hospital stipulated to render the service.

Contracts for rendered physical restoration contracts

There are three general types of contracts for the rendering of physical restoration services. Since they only touch incidentally upon the major problem of this thesis their description will be briefly presented.

CONTRACT FOR SERVICES OF PHYSICIAN, form VR-6 23/.--It is here that the orthopedic or cineplastic surgeon agrees to perform the stipulated operation for a figure not to exceed the specified amount. This fee also

---

22/ See Appendix B for forms VR-13a, 13b, and 13c.

23/ See Appendix B for form VR-6.

includes the essential follow-up care. Herein, also, the estimater makes his official estimate of duration of hospitalization. This legal agreement is witnessed and recommended by the Supervisor of Physical Restoration as well as signed by the operating practitioner and approved (or disapproved) by the State Supervisor of the Vocational Rehabilitation Division and by the Executive Officer of the Colorado State Board for Vocational Education.

CONTRACT FOR SERVICES OF ANESTHETIST, form VR-9 24/.--As above, the anesthetist stipulates the type of operation in which his services are to utilized. He also specifies the type of anesthesia and method of administration. Again, a maximum figure which cannot be exceeded is placed in the contract. The same officers described immediately above sign this contract.

CONTRACT FOR ORTHOPEDIC APPLIANCE, form VR-10 25/.--In unavoidable contrast to the two preceding official agreements, this contract stipulates the following:

1. Date of agreement.
2. Name of company and its address.
3. Type of appliance.
4. Maximum cost chargeable.

24/ See Appendix B for form VR-9.

25/ See Appendix B for form VR-10.

5. Agreement to furnish the required prosthesis with suitable attributes.
6. Agreement to provide gratis all necessary adjustments to insure proper fit during the four months ensuing from delivery date.
7. Promise to instruct clientele in the proper care and use of the appliance and render assistance in its successful use.

With the substitution of the Appliance Company and its representative for the medical specialist the same signatures as in the two prior cases pertain.

The process of distribution of the completed forms is not deemed of adequate pertinancy to the subject at hand to warrant further discussion other than to state that the client, the agency, the doctor, the appliance company, and the anesthetist each receive a copy of the completed contract.

Typically, upon completion of physical restoration the prospective rehabilitant is placed in either employment training or institutional training as circumstances dictate. The selection of training is largely one by the client, although matters of fiscal policy, duration of period involved, expense of equipment, tools and training supplies to be purchased, compatibility of formulated vocational objective with disability, and other factors also receive consideration.

In either type of training involved, the follow-

ing contract is negotiated between the rehabilitation service (which is a division of the Colorado State Board for Vocational Education) and the training agency.

CONTRACT FOR TRAINING, form VR-6 26/.--The provision for case number in the upper right hand corner of the form prevents confusion between two clients with similar names.

The period of contract is rather inflexible, and justifiably so. Unless extenuating circumstances can be demonstrated beyond a reasonable doubt, the failure of a client to complete his or her training within the stipulated time lapse is legal cause for cancellation. Legally, of course, the contract can be cancelled for any failure to meet any stipulation in the contract.

Under "Section II" is contained the constitutional responsibility for fulfillment of its contracted services. The blank in item "3. To make regular_____ reports to the State Board for Vocational Education..." permits flexibility in the periodic submission of such reports concerning attendance and progress and other pertinent training data bearing on the objectives of the contemplated placement.

In "Section III. The State Board for Vocational Education agrees:

26/ See Appendix B for form VR-6.

1. To pay to the Training Agency when properly claimed, for the above service, an amount not to exceed $_____ as follows:

_____

_____"

Herein is shown the manner in which payment is to be made, viz. monthly or by academic terms.

"2. To periodically supervise the instruction and training of the Trainee."

"Section IV. The Trainee agrees..."

1. To maintain a minimum 'average grade' for the required number of training hours to finish the prescribed course.
2. To perform such duties as are required by the Training Agency and the State Board for Vocational Education for the stipulated period.
3. To make regular detailed monthly reports to the agency during the period of contract.
4. To report to the State Board for Vocational Education immediately replete details of employment upon being so engaged.

Other sections of the contract do not generally obtain for the circumstances of this problem and are consequently presented without further comment.

The contract assumes legal status upon the completion of all the following signators and dates of signature:

1. Executive Officer of the Colorado State Board for Vocational Education.
2. State Supervisor of Vocational Rehabilitation.
3. Name of Training Agency.
4. Representative of Training Agency.
5. Trainee.
6. Area Supervisor of Vocational Rehabilitation (designated as agent, local agent, counselor, and rehabilitation agent throughout this study).

Upon the affixation of all signatures, the finished copies are distributed to the concerned parties.

Upon completion of the duly authorized contract the client then begins his training period and during the stipulated period reports periodically submitted (Form R-8) to the local agent by the training agency are consistently reviewed for evidences of adjustment and need for counseling.

TRAINING PROGRESS REPORT, Form R-8 27/.--The number of days present during the month reported offers a check on possible unreported illness or lack of client interest in the training. The training status (Item 3) is a constant reminder of the time at which the trainee will be ready for employment or his dropping of the training.

Item "4. Progress This Month:..." reveals

27/ See Appendix B for form R-8.

current rate of advancement toward the final goal of rehabilitation--suitable placement. "Quality of Work" represents an effort to evaluate excellence of performance in partial contrast to quantity produced.

Item "6. Cooperation in Training:..." is a tool for prognostication. Clues for further placement may be presented here. "Difficulties" may evoke more frequent professional supervision.

Item eight is designed to portray for the counselor an objective picture of the training absorbed by the client.

The subjective opinion of the trainer is sought for the impalpable qualities of the trainee in Item nine.

The point at which the client begins to earn a wage and its amount are noted in Item 10.

The residual training time for the completion of the course (Item 11) is herein shown. Prolongation of the stipulated period is not ordinarily permissable but extenuating causal factors of which illness is the most excusable, may occasionally alter circumstances.

The concluding statement "Recommendations for improving performance_____" are eagerly sought by the agent as positive, favorable factors satisfactorily conditioning clientele for ultimate employment. The name of the training agent and that of the officer or instructor in charge is affixed with the place and date specified.

Chapter IV

ANALYSIS OF DATA

Inasmuch as it is the purpose of this study to survey the placement and follow-up methods by which vocationally handicapped citizens are employed in northeastern Colorado 1/, the data secured during the process of the vocational rehabilitation of disabled persons in this section of the state are analyzed in this chapter. All factual information relevant to this purpose and accessible to the writer is included and its detailed discussion will be presented in another section of this chapter. The confidences of the individuals who were surveyed, needless to say, are held inviolate, and the clientele to whom reference may be made in this as in any other chapter of the treatise must therefore remain nameless and secure in the protection of anonymity. Fictitious names may be used here and there to facilitate the discussion and to clarify moot considerations of antecedence in the analysis of particular attributes of a given individual; but it is felt that their usage in no way detracts from the factual character of the discussion and may enhance the rather pedantic manner of discussion which is exceedingly difficult to eliminate in scientific analysis.

1/ See Appendix A.

Insofar as content of the chapter is concerned, it was thought that a meticulous scrutiny of such factors as the type of suitable placement made, the vocational training, the tools and equipment purchased, the original disability incurred, and the incidental surgery and prosthesis involved in the program of the Vocational Rehabilitation Division of the Colorado State Board for Vocational Education should provide, when properly analyzed, a basis for offering constructive suggestions in the formulating of policies for improving extant employment opportunities.

The able-bodied are naturally individual in every respect, including personality traits, intellectual attainments, latent possibilities for future greatness, and physical attributes. But physical variations cropping up as the sampler ranges the field for a representative sample are, by definition, not atypical of the group. The fact that their other attributes may vary widely is of no comparative consequence since these qualities are also anything but constant among the disabled. In addition, the impaired are obviously unrepresentative of the physically normal segment of the nation by virtue of their classified status. Furthermore, the myriad difference of impairments encountered among the vocationally handicapped precludes their consideration as a homogenous group.

In a very real sense the sample might be re-

garded as the universal population of an exceeding select and exclusively small group. For every case completely rehabilitated during the period covered by the survey in northeastern Colorado was thoughtfully examined for inclusion in the final sample. In the event that no irrelevant factors were discovered, the case was embraced by the survey. Therefore, one might consider that the sample was as expeditiously typical for the studied geographical area as it was possible to obtain at this time. With this final thought in mind the factual analysis will be presented under the following categories indicated by the problem analysis in the introductory chapter.

1. Types of individuals referred to the vocational rehabilitation agency in Greeley.

2. Situation prior to initiation of rehabilitation measures.

3. Remedial measures employed to correct above conditions.

4. Employment found for various types of handicapped individuals.

5. Methods used in following the training program and placement of clients.

Types of handicapped individuals referred to the vocational rehabilitation agency in Greeley

The problem posed by this survey, In what respect do present employment opportunities offer suitable

placement facilities for the vocationally handicapped in northeastern Colorado?, involves a number of imponderables when one encompasses the entire vocational panorama. Insofar as the individual is concerned, a rather specific answer may often be secured. But when regarded en masse the integration of countless highly differing individuals into a single vocational pattern is an insoluble enigma where a specific and relevant answer is sought for the group as a whole.

Since the individual is the core of the rehabilitation program, an examination of his disabilities at the time of referral to the rehabilitational agency appeared to be the logical point for initiating an attack on the problem. These dataare compiled in Table 1.

Curiously enough, despite the fact that the total number of visually disabled individuals referred to the agency during the fiscal year 1947 increased nearly five-fold, their percentage of the total cases reported dropped slightly in comparison with those reported prior to July 1, 1946.

The increase in the number of auditory disabilities reported during the fiscal year 1947 is large and may be partially accounted for by the expansion in personnel and service by the rehabilitation agency which had occurred some time before July 1, 1946. The effects of the expansion were not immediately reflected in the number or classification of the referrals because cooperative

Table 1.--TYPES OF INDIVIDUALS REFERRED TO THE NORTHERN AREA OFFICE, VOCATIONAL REHABILITATION DIVISION OF COLORADO STATE BOARD FOR VOCATIONAL EDUCATION DURING FISCAL YEAR 1947 AND FOR ALL PRECEDING YEARS AS OF JULY 1, 1946.

Disability	No. of cases reported prior to July 1, 1946	Per cent	No. of cases reported from July 1, 1946, to July 1, 1947	Per cent	Total	Per cent
Visual	3	05.6	14	04.9	17	04.9
Auditory	1	01.8	13	04.5	14	04.1
Cardiac	3	05.6	21	07.3	24	06.9
Orthopedic	31	57.4	141	48.2	172	49.9
Arthritic	2	03.7	12	04.1	14	04.1
Tuberculous	2	03.7	16	05.5	18	05.2
Miscellaneous*	12	22.2	74	25.5	86	24.9
TOTAL	54	100.0	291	100.0	345	100.0

*Covers all other types of disabilities including such of the impaired as Fraelich Syndromes, hermaphrodites, diabetics, asthmatics, psychoneurotics, mental subnormals, and those with chronically malfunctioning kidneys and stomachs.

activities require time for full development and the manifestation of this expansion reached its optimum during the latter half of the fiscal year 1947, which ended on July 1, 1947.

There was an increase of cardiological cases in absolute numbers and the comparative increase in per-

centage of the total cases reported during the latter of the two periods of time considered. The widespread incidence of rheumatic fever and its crippling aftermath may account for this swelling total of disabled hearts.

While the total number of orthopedically impaired individuals reported sustained an absolute increase during the fiscal year 1947, the percentage of total referrals designated as orthopedic disablements decreased during the latter of the two periods during which referrals were received by the rehabilitation agency. This decreased percentage in Table 1 may be palpable evidence of the early diagnostic and remedial activity which has been carried on for so many years by agencies specializing in the field of child health.

The number of cases of arthritis increased absolutely and percentagewise, also, which may be an indictment of the diet of this area. The unquestionable increase of the referred tuberculous may stem from immigration of the impaired from other sections of the nation. The indisputable increase of the miscellaneous classification is probably due to a number of factors. Improved diagnosis of obscure debilities and impairments entailed by industrial accidents during the recent war may swell this composite total.

A comprehensive glance at Table 1 reveals the overall picture of the general situation and stresses the relatively outstanding position of orthopedic dis-

abilities in this array of figures. It also inferentially stresses the contribution which prosthesis can offer to vocational rehabilitation.

The referral sources of receipted cases was thought to be of value in providing clues concerning the financial status and other environmental attributes of this portion of the clientele referred during the two periods above in Table 1. These data were consequently presented in Table 2.

Table 2.--REFERRAL SOURCES FOR CLIENTELE BROUGHT TO THE ATTENTION OF NORTHERN AREA OFFICE OF THE VOCATIONAL REHABILITATION DIVISION OF THE COLORADO STATE BOARD FOR VOCATIONAL EDUCATION DURING THE FISCAL YEAR 1947 AND FOR ALL PRECEDING YEARS AS OF JULY 1, 1946.

Referral source	No. of cases reported prior to July 1, 1946	Per cent	No. of cases reported from July 1, 1946, to July 1, 1947	Per cent	Total	Per cent
Educational sources	11	20.4	67	23.0	78	22.6
Health sources	22	40.7	91	31.3	113	32.8
Welfare sources	9	16.7	36	12.4	45	13.0
Governmental agency sources	5	9.3	60	20.6	65	18.8
Miscellaneous sources	7	12.9	37	12.7	44	12.9
TOTAL	54	100.0	291	100.0	345	100.0

An inspection of Table 2 indicates the increasingly important role played by governmental agencies as referral services and a moderate increase in the percentage of referrals received from educational sources. Perhaps a partial explanation of these percentage shifts initiated during the fiscal year 1947 (that is, from July 1, 1946, to July 1, 1947) may be accounted for by a change in "definitional" regard. When the school nurse refers a case, it may be a moot question of whether the referral source should be construed as an educational or a health agency.

Another cursory examination of Table 2 indicates the regressing percentages of referrals from health and welfare agencies during the latter of the two periods concerned in the table. In some respects this is a desirable trend, percentagewise, since it infers the possibility that welfare clients may be reaching the rehabilitation saturation point. It also implies that the health agencies may be ameliorating the debilities treated prior to their deterioration into vocational handicaps.

The rising percentage of referrals from government agencies is probably a statistical manifestation of the increasing age at which clientele are being received by the rehabilitation agency since federal organizations do not customarily "process" individuals at the early ages that many health agencies which often concentrate their efforts on children do.

The miscellaneous or "catchall" category includes such diverse sources as self-referrals, referrals through newspaper publicity, and referrals by relatives and other interested parties. In this statistical alcove are also included referrals from insurance companies and many private concerns in industry and business.

Situation prior to initiation of rehabilitation measures

In seeking the answer to the problem, In what respect do present employment opportunities offer suitable placement facilities for the vocationally handicapped in northeastern Colorado?, the writer discovered, first of all, the employed impaired generally held poorly paid jobs and that, secondly,many more of the disabled were not engaged in remunerative occupations, there being 31 of the 40 sampled who were jobless at the time of the survey. 2/

Among the employed group of nine the maximum salary was $35.00 weekly and the minimum, $3.00, with an average of $21.67, Table 3. The fact that members of this group were receiving considerably less than they were potentially capable of earning will be rather strikingly revealed in a subsequent comparison of these wages and those received after rehabilitation. Table 3 shows the salary picture of these employed at the time of survey.

2/ See Appendix C.

As a most pertinent example, the counselor presents Case Number Six 3/. Here was an experienced engineer with 15 years of education who was earning $25.00 a week at the time of survey. For the 14 preceding years he had suffered from multiple arthritis which had ultimately compelled him to abandon his professional career some years before he had requested rehabilitational assistance. In the intervening years following the abandonment of his career he had, on his own financial initiative, completed most of the requirements for a degree in law, despite the fact that he was supporting a wife and two children.

Table 3.--SALARY OF EMPLOYED GROUP DISTRIBUTED ACCORDING TO AGE.

Age	Weekly salary
19	$20.00
21	20.00
27	15.00
28	3.00
30 M	35.00
35	35.00
39	25.00
42	12.00
61	30.00
AVERAGE	$21.68

3/ See Appendix C.

Another case in point 4/ was one who had accomplished much as a draftsman in engineering design at the Ford-Dearborn Plant during the recent war, but who was employed at the time of the survey as a filling station attendant at $15.00 weekly. In addition to the high intelligence he demonstrated by achieving splendid grades in the Ford trade school, he also possessed a charming personality, an unfailing air of cordiality, and genial friendliness, in addition to an uncommonly good business acumen.

But, weekly income received, whether earned or merely granted by a philanthropic employer, is not the sole criterion upon which suitability of employment is predicated. For instance, the man who received the highest salary in the group 5/ was performing heavy manual labor which was incompatible with his physical disability. For him a change in jobs was imperative despite his comparatively high wages among the group.

Another man 6/ with a worn-out artificial leg was employed as a caretaker at $30.00 a week and his advanced age certainly did not offer much promise of a brighter occupational future in this or any other job. Nonetheless, here was a situation which called for immediate action--the need for assistance was one of extreme

---

4/ See Case Number 29, Appendix C.

5/ See Case Number 23, Appendix C.

6/ See Case Number 36, Appendix C.

and desperate urgency. He had to have a new leg to retain his position but he was financially unable to provide the prosthesis.

In seeking a cause for unemployment of the 31 clients in this sample, the counselor began to probe into the personal characteristics of the clientele. Reminiscences of the thirties immediately recalled to mind the possibility that the average age might be too advanced for employer acceptance. It was consequently found that among the unemployed the maximum age was 57, the minimum age 16, and the average 29, Table 4. One can thus see that while the "patriarch" of the group was rather advanced in age for employer acceptance in times of labor surpluses, the average age is not excessively high, while the minimum is almost too youthful. Overage as a factor, then, can hardly be considered as exerting a debilitating influence upon their employability status as is shown by comparative figures for the entire group, employed and unemployed.

Table 4.--MINIMUM, AVERAGE, AND MAXIMUM AGE OF SAMPLE CLASSIFIED ACCORDING TO EMPLOYED AND UNEMPLOYED.

Age	Entire group	Employed group	Unemployed group
Minimum	16	19	16
Average	30	33.5	29
Maximum	61	61	57

Duration of the disability.--Another aspect of the age is the duration of the disability. The minimum, average, and maximum span of time from incurrence of the disability to the time of survey is shown in Table 5. An examination of the figures would seemingly discount the popular conception that the longer one has the disability the more nearly unemployable the individual tends to become. As a point of issue the counselor presents the case 7/ of Bill_____ who was cursed with a dislocated right hip when he came into the world some 41 years ago. Despite an incredibly large number of employer rejections of his attempts to obtain permanent employment and an interminable series of short, part-time jobs and his disengaged status at the time of the survey, his "bulldog" determination retained the undimmed power of his youth, and he finally became suitably employed in a job compatible with his disability.

Table 5.--MINIMUM, AVERAGE, AND MAXIMUM LENGTH OF TIME DISABLED ACCORDING TO EMPLOYMENT STATUS OF CLIENTELE.

Employment status	Length of time disabled in years		
	Minimum	Average	Maximum
Employed	10.00	23.75	40.00
Unemployed	0.00	10.80	41.00
Entire group	00.00	13.50	41.00

7/ See Case Number 11, Appendix C.

The relation between length of time disabled and salary earned is shown in Table 6. From the figures in this table, no causal association was readily apparent between the span of time disabled and the wages received. For instance, the man receiving the highest salary 8/ had been "disabled" for a generation, while a close competitor 9/ incurred his disability some 40 years ago. At the other extreme of the salary scale were the two persons who had borne their impairments 38 10/ and 28 11/ years and who were receiving $12.00 and $3.00 a week, respectively. In the latter case, the picture is distorted by the part-time nature of his job while the client was attending one of the institutions of higher learning.

Another facet of the problem, as it were, is the traditional heritage of the race--the mutations and "sports" which evolve from generation to generation presumably in accordance with the logical and yet oftimes practicably inexplicable Mendelian Law. When these mutations are added to childbirth injuries they aggregate to many, many cases. The role of the congenitally impaired is therefore an exceedingly important one in vocational rehabilitation.

8/ See Case Number 23, Appendix C.

9/ See Case Number 36, Appendix C.

10/ See Case Number 16, Appendix C.

11/ See Case Number 31, Appendix C.

Table 6.--ASSOCIATION BETWEEN LENGTH OF TIME DISABLED AND SALARY EARNED BY THE EMPLOYED GROUP.

Weekly salary received	Length of time disabled
$35.00	30 years
30.00	40 years
25.00	14 years
20.00	10 years
20.00	4 years
15.00	26 years
12.00	38 years
3.00	28 years

In further pursuit of this line of thought the quest for germane associations between origin of the disability and employment status brought to light the data presented in Table 7.

Table 7.--CLASSIFICATION OF CLIENTELE ACCORDING TO ORIGIN OF DISABILITY AND EMPLOYMENT STATUS.

Origin of disability	Employed		Unemployed		Entire group	
	Number	Per cent	Number	Per cent	Number	Per cent
Congenital impairments	2	22.2	7	22.6	9	22.5
Disease incurred	6	66.7	13	41.9	19	47.5
Accident	1	11.1	11	35.5	12	30.0

The distribution of origin of the disability immediately preceding shows a constancy in the percentage of the congenitally impaired throughout the three groups, while the other two of the trinity comprising the origins of disability category vary widely.

Certain fears of "second-injury" claims 12/ for compensation may account for the small percentage of the employed group having sustained accident-incurred disabilities and the large percentage of such impairments among the unemployed, Table 7. It may be that the "once-injured, always accident-prone" attitude of employers toward those who have fallen in industry will always haunt their vocational endeavor. Those with disease-incurred impairments have a plurality in each classification but their numerical strength predominates among the employed category.

The interrelationship between origin of disability and weekly wages, if such exists, may be discerned in the figures shown in Table 8.

Table 8.--WEEKLY SALARY OF EMPLOYED GROUPS CLASSIFIED ACCORDING TO ORIGIN OF DISABILITY.

Origin of disability	No. of cases	Weekly salary		
		Minimum	Average	Maximum
Congenital	2	$ 3.00	$19.00	$35.00
Disease incurred	6	12.00	21.17	35.00
Accident	1	30.00	30.00	30.00

12/ See Review of Literature.

Since the preponderance of employed clientele have disease-incurred disabilities the preceding wages offer a truer perspective of the state of their affairs than is so for the other two groups. The minimum wage for the congenitally impaired is only part-time and therefore distorts the above depiction. For the category "accidentally acquired" a solitary case was applicable. Therefore, the minimum, the average, and the maximum are all the same for this "group."

The diagnosis of the disability as a possible relevancy of employment and employability status.--In Table 9 was considered the diagnosis of the disability as a possible relevancy of employment and employability status to ensue logically and the clientele were so classified. The miscellaneous group was comprised of one case of stomach ulcers with accompanying swelling of the hands and feet, one hermaphrodite, one speech defect which was accompanied by an orthopedic impairment and so classified, one psychoneurotic with accompanying heart disability, but which was listed under miscellaneous, and one Fraelich's Syndrome. Where the diagnosis of disability revealed multiple impairments the client was "pigeonholed" in the category which seemed to be the most serious vocational handicap. Subjective judgment herein could not be avoided but it was felt that by a pooling of the judgments of the examining practitioner, that of the counselor, that of the supervisor of physical restoration,

Table 9.--DIAGNOSIS OF DISABILITY, ORIGIN OF DISABILITY, AND EMPLOYABILITY FACTORS, ENTIRE GROUP.

Diagnosis of disability	1 Number of cases	2 Origin of disability (5)	3 Average duration of disability in years	4 Average age at survey in years	5 Employment history (average) (1)	6 Average employment status at time of survey (2)	7 Average weekly salary in dollars (3)
Visual	1(4)						
Auditory	5(4)	1.75	9.00	30.75	2.00	0.00	0.00
Cardiac	4(6)	2.00	3.67	22.50	1.33	2.50	5.00
Orthopedic	24	1.46	16.43	30.75	2.33	2.50	5.71
Arthritic	4	2.00	9.00	34.75	2.50	5.00	15.00
Epileptic	1	0.00	3.00	31.00	2.00	0.00	0.00
Miscellaneous							
stomach ulcers	1	2.00	9.00	31.00	3.00	0.00	0.00
hermaphrodite	1	3.00	18.00	18.00	1.00	0.00	0.00
speech defect	0(4)						
psychoneurotic	1	?	6.00	32.00	2.00	0.00	0.00
Fraelich Syndrome	1	3.00	28.00	28.00	2.00	5.00	3.00

1. 3 arbitrarily assigned to substantial work history, 2 to part-time or unsubstantial employment, and 1 to no employment.

2. Full-time employment assigned 10 points, part-time employment 5 points, unemployment 0.

3. Arithmetic average of wages earned by entire group within a category.

4. One case a duplicated count actually included under orthopedic.

5. The numbers 3, 2, and 1 indicate congenital origin, impairment compensably accidentally acquired, and impairment non-compensably accidentally acquired, respectively.

6. Duplicated count. One of these actually included under psychoneurotic.

that of the medical consultant, and in cases of mutual doubt, that of the state supervisor for vocational rehabilitation, the evils of subjective opinion could be minimized.

The multiple nature of the disability has been discussed previously and here it is considered of only referential importance. To recapitulate, the visual impairment was not statistically treated since it was associated with an orthopedic disadvantage and so classified. The same reasoning was applied to one of the five auditory "debilities." An oddly interesting association between one of the cardiac cases and its "conjugal" psychoneurosis, which will be discussed at some length under the related factors of other columns, impelled the writer to construe the major disability to be psychoneurotic. One of the orthopedic cases was also affected by partial loss of hearing and still another was further handicapped by a speech defect. As was stated at an earlier point in the discussion, the hermaphrodite was considered a male.

Origin of disability.--A conviction that an association of relevancy existed between origin of disability, diagnosis of disability, its effect upon employment status and employability status suggested the above presentation. It will be readily recognized that no one can "rate" a congenital "impairment" as being in any way more desirable or less desirable than one incurred by disease or acquired through accident. The assignment of numerical values to these origins is merely an effort to avoid ambiguity insofar as possible in the discussion of the subject.

These averages will be somewhat heavily weighted toward the accidental acquirement of disability since two values were given this source of origin. The lower is consequentially more remote from the arithmetic average of the values assigned to each of the various origins. Conversely, only one value was given the congenital impairment. This was done in order to place emphasis and stress upon disabilities acquired rather than inherent. It was felt that those disabilities with which one is born become more firmly integrated and fused within the personality and character of the individual than those acquired in later life. If this premise can be accepted then, there is no particular object in considering the origin of congenital impairments apart from any other feature of a person.

It will be noted in column 2 above that the auditory disadvantages in this sample were more inclined to be accidental acquirement in origin, while the cardiac appears to be entirely disease-incurred. The large number of orthopedic cases endow the accidental and disease-incurred origins with especial significance. Here is reflected the widespread incidence of the mysterious and dread poliomyelitis as a disabling agent of humanity.

The arthritics entirely originated from disease. Where epilepsy is concerned the origin of the impairment is often an enigma, and this case is no exception 13/. It is true that the onset of the affliction was presumably first noticed at an adult stage in life and supposedly resulted from an accident, but there may also have been an inherent organic weakness within the neural structure which predisposed the person to instability and which was aggravated by the subsequent injury.

A question of emotional imbalance may also logically ensue from the discussion of this case. Perhaps the fact that many employers and much of the public regard the epileptic with superstitious dread naturally impels such a one to "cover-up" his affliction.

For the miscellaneous group in Table 9 no conclusive analyses can be made because they are so few in number. However, it is singularly interesting to note

---

13/ See Case Number 10, Appendix C.

the origin of the disability of the psychoneurotic. He did have a slight lesion of the heart but it was not construed by examining doctors to be vocationally disabling. Within his mind, however, he apparently conjured up fearful vision of his condition and was consequently unable to work consistently. The Fraelich Syndrome 14/ is a wonderfully intelligent young man who was an honor student at one of the state institutions of higher learning.

The duration of the auditory disability appears to cover an average span of time for the group as a whole. The case of a 57-year-old man 15/ who had lost his hearing forever is of particular interest. The origin of the disability was apparently congenital in nature despite the fact that complete loss was not sustained until he was 44 years of age. It is pathologically neural and its inherent nature is manifest in the progressive debilitation of function of the hearing of his son.

The cardiac cases were of short duration at the time of the survey, Table 9. Within a brief span of years after incurrence of the disease the clients were surveyed and initial rehabilitation action was under way.

The orthopedic impairments were of long standing duration which reflects, in no small measure, the

---

14/ See Case Number 28, Appendix C.

15/ See Case Number 18, Appendix C.

nature of the origin of the disability. Accidentally acquired impairments appear to have been much more common a generation ago than today. And this is in marked contrast to the large-scale incidence of disabling poliomyelitis during the last decade. The influence of congenital origin is of significance in this category by virtue of its classified status. One has to be 16 years of age or over to be eligible for service by the local rehabilitation agency.

The arthritic impairment is a disability of long duration, Table 9, despite the fact that the onset is experienced later in life than is the case for many impairments. The prolonged period of convalescence necessitates the passage of a long interval of time between the onset and the initiation of rehabilitation measures.

The youthful age of cardiacs may come as a shock to many but the incurrence of rheumatic fever among the children and adolescents of the nation is the occasion for many disabled hearts which have been termed "the major chronic ailment of our time." 16/

Employment history.--Column 5 represents another attempt (Table 9) to endow the subjective opinion of employment history with more exactitude and interpretative precision. The interviewee who stated that he had a "substantial" work record was accorded a value of 10

16/ See Chapter on Review of Literature.

points and one who claimed an "unsubstantial" or part-time vocational past was given five points. Those who held no claim to past employment of any kind whatsoever were noted as zero. From effort to permit analytical interpretation of the occupational past of the clientele the following suggestions evolved.

Those with impaired hearing had not fared well in their attempts to obtain work. The cardiac cases were the only group which sustained a poorer employment record. There were individual instances wherein a worse work history was encountered but only the one group was less desirable. It must be remembered also that the cardiac group herein represented is one of extreme youth with an inherent propensity to engage in other than occupational endeavor.

The relatively good employment record of the orthopedically impaired, in Table 9, is a tribute to their persistence in overcoming the emotional prejudices of society against their kind. The fine work history of the arthritics in Table 9 may be due to a number of causes. In most instances the individual may have compiled a splendid record prior to the onset of the disablement and this in itself may have given him an initial impetus and a point of reference upon which resumed employment could be built. This very considerable advantage was often made possible by the relatively "advanced" age of the individual at the time of impairment. That

he had, on the average, nearly 26 years of excellent health prior to the onset of the disease compared with figures of less than 21 years for those with the other disabilities is certainly worthy of note.

The authenticity of this surmise or premise is reflected in column 6 in Table 9 in which another effort is made to formulate a plan for statistical analysis of the "average" employment status of each of the disabled groups wherein some possible vocational implications might be discerned. The arthritic group again topped the list and perhaps because of the immediately preceding hypothesis.

The cardiacs as a group in Table 9 had a mediocre employment status at the time of survey by virtue of their extreme youth with its "conjugal" prolongation of educational infancy which had not permitted them to become vocationally prepared through work experience at the time. The orthopedic group had achieved a moderate amount of employment status at the time of survey and this was endowed with vocational significance because the group was so comparatively large in number. An isolated instance, here and there, did not so materially influence the total picture for the group as it would for the smaller numerical groups.

Appliances worn at the time of survey.--The appliances worn at the time of survey were thought to have possible vocational significance and their influence,

if any, is statistically depicted in Table 10.

Table 10.--CLASSIFICATION OF CLIENTELE USING APPLIANCES ACCORDING TO WEEKLY WAGES RECEIVED, EMPLOYMENT STATUS, AND EMPLOYMENT HISTORY.

Appliance worn at survey	Number of cases	Average for each category: Employment history	Employment status	Wage (weekly)
Crutches	2	3.00	5.00	$17.50
Braces	2		0.00	0.00
Artificial hands	1		0.00	0.00
Artificial legs	3		3.33	10.00
Hearing aids	2		0.00	0.00
Special shoes	1		0.00	0.00

The employment history of those using crutches was excellent, Table 10, and this may be another manifestation of the interdependence of the factors, arthritic diagnosis of disability and employment history, which was considered at some length under diagnosis of disability. The record for those wearing braces was poor from which may be inferred that the disability which the brace was designed to alleviate was of an extremely grave nature insofar as vocational implications are concerned.

The mediocre employment history of the girl 17/ with the artificial hand is a silent acknowledgment of the vocational utility of and bears witness to the relative ineffectiveness of an artificial replacement. The

poor record of the boy with the special shoe was probably an induced phenomenon. The unavoidable inclusion of the extreme youth of the claimant was a factor of overwhelming occupational significance. He had just completed high school at the time of the survey and had consequently had no time to have achieved a vocational history.

Education, sex, and marital status.--The intricate complexities of the play and interplay of the mechanical aspects of the disability, education, sex, and marital status of the individual in conjunction with his age were the final factors deemed worthy of attention, Table 11. The pernicious influence of impaired hearing upon ability to learn in public school is shown in the data. For this group the average educational attainment is the lowest of all the groups. Only individuals have lower formal educational achievements. This inability in oral communications pervades the entire lives of the affected as is indicated by the fact that only one of the four is married despite an average age of 30.75 years and the fact that two of the four are women for whom the marriageable age is typically several years younger. Here again is an indication of inability to become absorbed in the usual manner of living.

In regarding the cardiacs, Table 11, modern educational trends can be discerned. The youth of the group and the high degree of academic mastery compared with older members of the group indicate the increasing

influence of the school during the past quarter century. All these claimants were single and had no dependents.

The large number of the orthopedics, Table 11, probably made the statistical consideration of the group more reliable, and the fact that the group had a mean scholastic record of 10.21 grades may indicate a number of explanations. The relatively high educational attainments of the group for their age status may be a local phenomenon which in reality may have been commonplace in certain communities during their high school days in the thirties. Another logical premise may have been the perhaps necessary sheltering of the group and a praiseworthy attempt by parents and concerned parties to compensate the impaired for loss in functional power by added educational advantages.

This attempt by the counselor to portray the situation as it existed at the time of survey was felt to be necessary for the clarification of discussions concerning the later rehabilitation of clientele. In this manner the soft, sentimental sympathy which often distorts the relationships of the normal with the disabled is replaced with a more realistic point of view.

Remedial measures employed to correct above conditions

It is desirable, at this point, to pause for a recapitulation of the procedure through which the claimant is conducted from initial contact by the local

Table 11.--CLASSIFICATION OF CLIENTELE ACCORDING TO AGE, EDUCATION, SEX, MARITAL STATUS, AND DIAGNOSIS OF DISABILITY.

Diagnosis of disability	No. of cases	Average age at time of survey	Average educational attainments (years)	Sex		Marital status		Average no. of dependents
				M	F	S	M	
Visual	1*							
Auditory	5*	30.75	9.75	2	2	3	1	1.00
Cardiac	4*	22.50	13.00	1	2	3	0	0.00
Orthopedic	24	30.75	10.21	18	6	15	9	1.13
Arthritic	4	34.75	13.00	3	1	2	2	1.00
Epileptic	1	31.00	10.00	1			1	3.00
Stomach ulcers	1	31.00	12.00	1			1	2.00
Hermaphrodite	1	18.00	8.00	1		1		0.00
Psychoneurotic	1	32.00	8.00	1			1	6.00
Fraelich Syndrome	1	28.00	15.50	1		1		0.00

*One of these cases included under another category and the total in this classification should be reduced by one.

rehabilitation agent to the point where physical restoration is initiated.

During the interview, which is the primary official step in the rehabilitation process, the agent considers all the vocationally pertinent factors which he is capable of subjectively comprehending. One of the first questions which arises is that of feasibility as well as eligibility. A 78-year-old man may exemplify

eligibility. He may have a severely disabled heart which would indisputably bar him from remunerative employment. However, his education may have been badly neglected so that he could not become engaged in clerical work or other sedentary endeavor. The only alternative possibly left might be some sort of strenuous physical work which would be precluded by virtue of the weakened heart. The advanced age of the claimant was purposefully left to the last because age alone is not the determining factor. Employer acceptance, however, is an indispensability which one cannot ignore. In vocational situations, therefore, where a maximum age limit is immutably set by the employer it must be complied with. Under such conditions, consequently, the client may not be sent to an examining physician for a medical appraisal. Why spend the time of the applicant, that of the doctor, and precious dollars of limited funds for an obviously useless purpose?

Where any likelihood of doubt exists, however, the claimant is then provided with a medical examination record blank with an accompanying letter of instruction to the doctor. He then proceeds to the practitioner who provides a thorough physical examination and records the results in the aforesaid blank.

There is space provided on the record for recommendations. Here the physician may write that a medical consultation with a qualified specialist is

essential for a complete diagnosis. This examination is then made by the qualified specialist and, incidentally, this action is inevitable in matters where physical restoration is undertaken by the serving agency, and subsequent physical restoration is predicated upon the results of this recorded consultation.

Prior to the actual initiation of this activity a number of contracts, and a release of responsibility where surgery is involved, are signed by the claimant and concerned parties. Then, actual services are rendered the first of which is usually surgery where a complete restoration program is contemplated.

Insofar as this study is concerned, however, those cases in which drastic ameliorative medical measures were undertaken had not been complete rehabilitated at the time data were gathered. Therefore, this sometimes essential service is not included in the discussion. Ordinarily the ensuing step in the overall picture is that of prosthesis or the providing of appliances to supplement or replace the impaired function or lost facility.

Physical restoration accomplished.--The prosthetic devices furnished by the agency were in general of modest cost and consequently may be of interest to the taxpaying public. Here, as elsewhere, if wise and prudent decisions regarding the relevancy of contemplated measures are uniformly reached, one gets what he pays for.

The judicious economy of these purchases is manifest in Table 12. Case Number One reveals the many associated relevancies which must enter the vocational picture of rehabilitation. Ordinarily one would think that dentures would be of little vocational need in the rehabilitation of the arthritic. But in this particular instance the client had the talent of artistry in no small degree and he also had a "bulldog" persistency. The role that his defective teeth played in the program of restoration to economic productivity was important as will be seen. His teeth were thought by the medical consultants concerned to be a possible source of the infection which had caused his deformity. Consequently, their removal was suggested as a part of health improvement. However, Case Number One was getting to the point where his artistry could be translated into tangible articles of value. The problem remained at selling these articles to a potential customer which required salesmanship on the part of the client. This made necessary clear speech and thus replacement of decayed teeth was necessary. The dentures were therefore provided with the thought that profitable disposal of these showpieces was fully as important in rehabilitation as his ability to produce them.

Case Number 19 in Table 12 was one of those persons whose incurrence of disability resulted from disease in late adolescence. Alleviation of her deafness

Table 12.--COST OF PROSTHETIC APPLIANCES.

Case No.	Nature and cost of appliance	Diagnosis of disability	Educational attainment	Employment history	Age at survey	Employment status at time of survey	Weekly salary received at time of survey
1	Dentures $50.00	Arthritic knees and hands	11 grades	Substantial	45	Unemployed	$00.00
19	Net cost for new hearing instrument $34.00	80% loss of hearing	14 grades	Part-time	21	Unemployed	00.00
36	Artificial leg purchased by charitable agency $175.00	Left leg amputated below knee 40 years ago	8 grades	Part-time	61	Employed	30.00
38	Glasses $23.50 Brace $15.00	Bilateral dislocation of hips	8 grades	Part-time	38	Unemployed	00.00
40	Purchase of leg $125.00	Left leg amputated 7 inches below knee	12 grades	Substantial	32	Unemployed	00.00

was possible despite an 80 per cent loss of function. She had acquired normal acoustical intelligence prior to her loss of hearing and was subsequently enabled to interpret sound despite some inevitable distortion inherent in its magnification. Otherwise a hearing instrument might not have proved feasible except as an

auditory aid in lip-reading which is a difficult art to master.

Case Number 36 was a unique one in that it involved the blended efforts of two cooperating agencies. A local charitable organization provided financial aid in the purchase of the prosthesis since the rehabilitation agency was temporarily out of funds for physical restoration assistance. It also held some claim to distinction in that the claimant was advanced in age and had sustained the impairment some 40 years ago. However, extenuating circumstances, the saving grace, provided for in any sensible set of regulations came into play and transformed an ordinarily hopeless case into a very promising one. Here was a man who had, in a sense, earned his way through life despite the loss of a leg and held a job at present but needed a new leg to continue to hold his job. He had demonstrated the ability to wear prosthesis for over a generation and the question at issue was merely the purchase of its improved counterpart since the original had eventually worn out.

The futility of money alone as a resource upon which rehabilitation can be consummated is illustrated herein. The local "charity" was able and eager to provide the funds for the renewal of prosthesis but naturally knew little of the procedure upon which one must rely to insure satisfaction. The local rehabilitation agency "knew the ropes" but temporarily lacked the

necessary funds. By dovetailing activities the job was done to the mutual satisfaction of all interested parties.

Case Number 38 exemplified a number of the hypotheses presented from time to time in earlier sections of this treatise. Her lack of bodily beauty and symmetrical physique may have been a contributing factor to disruption of her marriage from which was left a male issue. Her lack of employment at the time of the survey also may have illustrated the principle of the refusal of society to regard the impaired as vocational entities. Another interesting facet of this case was the fact that although her normal vision was fair, she needed glasses badly for the exacting work in which she was trained and successfully placed.

Case Number 40 was that of an able and conscientious worker who had lost his left leg in an automobile accident shortly before his initial contact with the local agency. The prosthesis and subsequent vocational training enabled him to fully exploit his potential capacities in earning power.

Vocational training.--Where it was considered essential to suitable employment in an occupation compatible with the individual disability, vocational training for the deviate from the physically normal population was initiated. Relevant data for this purpose are contained in Table 13.

Case Number One was described at some length in

Table 13.--CERTAIN CHARACTERISTICS OF GROUP RECEIVING VOCATIONAL TRAINING

Case No.	Age at time of survey	Sex	Marital status	No. of dependents (exclusive of spouse)	Educational attainment in grades	Vocational training objective	Length of training in months	Type of training	Cost of training	Weekly salary at time of survey
1	45	M	M	2	11	Commercial artist	0	Correspondence school	$74.06 for equipment	$ 0.00
6	39	M	M	2	15+	Lawyer	3	Institutional	$35.00 for training $63.00 for equipment	25.00
8	20	F	S	0	14	Teacher	3	Institutional	0	0.00
11	41	M	S	0	8	Mechanic	0	Business concern	$119.00 for tools	0.00
13	19	F	S	0	13	Secretarial	3	Institutional	$42.00 for instruction $12.00 for supplies	20.00
17	39	M	M	3	10	Watch repairman	12	Trade school	$300.00 for instruction $149.00 for tools*	0.00

Table 13.--CERTAIN CHARACTERISTICS OF GROUP RECEIVING VOCATIONAL TRAINING.--Continued.

Case No.	Age at time of survey	Sex	Marital status	No. of dependents (exclusive of spouse)	Educational attainment in grades	Vocational training objective	Length of training in months	Type of training	Cost of training	Weekly salary at time of survey
19	21	F	S	0	14	Dietitian	21	Institutional	$267.00 for instruction $48.00 for equipment	$ 0.00
22	18	F	S	0	12	Medical technologist	3	Institutional	$24.00 for instruction	0.00
23	30	M	M	3	8	Body and fender repairman	6	Business concern	$90.00 for instruction $47.68 for equipment	35.00
24	18	F	S	0	13	Secretary	7	Business college	$40.00 for instruction $5.00 for equipment	0.00
25	19	F	S	0	12	Beauty operator	9	Business concern	$50.00 for instruction $29.00 for equipment	

Table 13.--CERTAIN CHARACTERISTICS OF GROUP RECEIVING VOCATIONAL TRAINING.--Continued.

Case No.	Age at time of survey	Sex	Marital status	No. of dependents (exclusive of spouse)	Educational attainment in grades	Vocational training objective	Length of training in months	Type of training	Cost of training	Weekly salary at time of survey
31	28	M	S	0	15½	Teacher	2	Institutional	$60.57 for instruction $3.95 for equipment	$ 3.00
29	27	M	S	0	12	Teacher		Institutional	$4.80 for supplies	15.00
39	22	F	S	0	12	Secretary	4	Business college	$47.00 for instruction $12.00 for equipment	0.00
40	32	M	M	2	12	Radiator repairman	3	Business concern	$75.00 for instruction $140.00 for equipment**	0.00

*Also had $300.00 for board and room.

**Also had $75.00 for maintenance.

the section on physical restoration. In this connection it was felt that only the fact that he received most of his instruction by correspondence was of interest. The culminating series of extension instruction he received covered a two-year period but neither the length of training nor the instructional cost was brought into the picture since the training was not paid for by the rehabilitation agency. His initial contact with the agency occurred near the completion of the training course and it was practically paid for in its entirety at the time. However, the claimant did need equipment with which to work. With suitable equipment the artisan can more nearly produce a sufficient volume of business necessary for his economic well-being. It will also be noted that he was unemployed at the time of the survey.

In the consideration of Case Number Six several factors are of importance. The age at the time of survey was relatively advanced and behind that fact lies an interesting story of perseverance and drive of one who refused to be discouraged by the incurrence of an impairment after once having attained a measure of vocational success. He had been an engineer but the onset of the disability forced him to abandon a promising career and seek a more sedentary position. The lapse of years between his formal educational training periods perhaps contributed to the confusion regarding his academic attainments. They were, in all probability, more than the

15 grades indicated above, since he completed his legal training to appear before the bar as a practicing lawyer in three months after initial contact with the counselor. The comparatively large cost for books and supplies in relation to tuition costs was entailed by the necessity for supplementing his meager law library prior to the establishment of practice. His salary at the time of survey was next to the highest for all who received vocational training.

Case Number Eight was one who failed to attain the vocational objective formulated but who nevertheless was successfully rehabilitated in another area of occupational endeavor. Her sojourn in college was exceedingly brief and the officials at this institution of higher learning did not charge the rehabilitation agency for her presence there.

Insofar as Case Number 11 was concerned, instructional costs as a fiscal item did not enter the scene. The training was provided free of cost but the client needed a complete set of tools to perform successfully his duties as a mechanic. His "advanced" age was not ordinarily as serious as would be expected because he had not acquired a family and was relatively mobile.

Case Number 13 was one whose ultimate vocational rehabilitation was probably still in a state of flux at the time she was "closed" as employed. One

might say that the beneficial influence of the training upon her vocation had not begun to manifest itself fully at the time of her departure from the rolls of the agency as "employed." This would be fiscally true since her salary prior to and subsequent to rehabilitation was the same. However, in her future career she should benefit materially from this training since she was placed in a position for which she was trained and in an occupation compatible with her disability.

In the contemplation of Case Number 17 the total amount spent was found to be $749.00, a rather large figure. The results of the training, however, in rehabilitation rewards more than justified the expenditure of this very considerable sum. The counselor in rehabilitation work must constantly keep in his intellectual vision a myriad of related but diverse factors. Here the severity of the impairment was a powerfully motivating factor in his selection by the agent for rehabilitation assistance of such material magnitude. His ultimate placement did not include a large salary but it was adequate to meet his modest needs and the position was personally gratifying to him. His interest, his ability, and his health were concurrently considered in the training and placement to the individual satisfaction of all concerned parties.

For Case Number 19 several unusual circumstances soon became patent upon examination of her status at the

time of survey. Here was a young woman who had completed two years of college prior to her first contact with the counselor and might have been thought to have adequate training and education by the undiscerning observer. A more penetrating glance at the situation revealed the fact that she completed her 14 grades prior to the onset of the impairment of her hearing plus the fact that she had lost 80 per cent of her acoustical apperception at the time of the survey. She was educated as a normal individual, and reported to the counselor as a distinctly different and vocationally handicapped person for whom her past training was of little occupational value. The rather long training period was partially entailed by the nature of the training as a dietitian and partly necessitated by her inability to indulge successfully in oral communications which is so essentially a part of spoken instructions.

Case Number 22 again is a case where superficial judgment might indicate failure of vocational training but where a more profound inspection would reveal a satisfactory and suitable employment. Questions of her ability and willingness to complete the medical technology course at an institution of higher learning were of course relevant considerations of the time of the initiation of the training. There is a moot point involved here, however, and that was her positive and irrevocable conviction that she was not qualified, or

more likely, not willing to complete the course of study prescribed to become a medical technologist. If her desire to matriculate in the institution had been thwarted she might never have been so completely satisfied with her ultimate placement.

Insofar as Case Number 23 was concerned the job training was as successful as any in which the counselor has been privileged to participate. Despite the fact that the claimant was earning a weekly stipend of $35.00 at the time of survey he was not suitably employed. The heavy manual labor involved was gradually breaking down his health and was, of course, incompatible with his disability. His ineffective manual dexterity very positively limited the occupational areas in which he could successfully compete with his able-bodied peers. With his impaired manual faculties, body and fender work seemed to be one of the very few vocations for which he was constitutionally, functionally, and educationally fitted. That this vocational objective was attained at such a modest cost to the taxpayer is a source of pride to the counselor.

Case Number 24 was that of a young girl with a disabled heart. She had more or less vaguely planned to attend college. After she had done some intensive thinking on the subject, however, she formulated rather definite occupational plans and decided to enter the stenographic area of vocational endeavor. The occupa-

tional realization of her training plans which were capped with suitable employment was indisputable justification for her prudent and judicious decision. A seven-months' training course is certainly preferable to a four-year college course when other things are approximately equal.

Case Number 25 also was trained in a very utilitarian manner to become a beautician in a business establishment. Her placement when considered in the light of her disability was thought to be excellent.

One of the most urbane and congenial of all the claimants was designated Case Number 29. He had a brilliant intellect, but was also sufficiently astute to present an appearance of mediocre intellectual capacity in his ordinary social intercourse with the public which he met with such aplomb and nonchalance. His uncommonly fine business acumen stood him in good stead in his business dealings with the public and may have played a part in his dropping the training he planned to receive as a teacher of mathematics. Despite his dropping out of training from an institution of higher learning a few days after matriculation he was finally placed in a satisfactory situation.

Case Number 31 was the Fraelich Syndrome to whom attention had been previously directed in this chapter. From a purely economic point of view as well as from many other viewpoints this placement was one of the

most successful ever made by the counselor. Collegiate success was assured from past academic achievement at the time of the survey. The welfare of humanity was faithfully served by his ensuing entry into the teaching profession as a splendid pedagogue and his contributions to the coffers of the nation in income tax during his first year of employment would have satisfied many a loan shark as ample return on his investment.

A rather poor adjustment to society was evinced by Case Number 39. Her physical unattractiveness was especially poignant to her as she was in the flower of maidenhood--the glorious age of 22--and her disappointment in affairs of the heart was not calculated to endear her to the public with whom she had to cope. Her being lost in the void of this abyss consequently entailed her loss of several positions in the past. Her final placement was considered good at a fair salary.

Case Number 40 which involved physical restoration and which was consequently described under that preceding section of this chapter was a rather expensive rehabilitation but the proof of its soundness was brought to light in a review of the final placement. The training was provided in the actual business establishment in which he later found suitable employment.

In a very real sense this and the preceding section of the chapter might be regarded as an introduction to the final section--the final employment of the

impaired--since they are often preparatory measures for suitable placement in an occupation compatible with the individual impairment.

Employment found for various types of handicapped individuals

The preparatory phases of the complete rehabilitation program for those who were in need for such services were presented in rather replete detail in the preceding sections of this chapter and consequently only brief mention will be devoted to these individuals in this, the closing section.

The analytical procedure of dissembling the component parts of a problem into its individual segments and of then scrutinizing the separate parts with extreme care suggested the manner in which this section will be presented. In pursuit of this organizational policy the entire salary picture as it existed prior to and subsequent to rehabilitation is computationally delineated in Table 14. 18/

Table 14.--COMPARISON OF SALARIES BEFORE AND AFTER REHABILITATION.

Weekly salary	Prior to rehabilitation	Subsequent to rehabilitation
Minimum	$ 0.00	$12.00
Average	21.55	34.21
Maximum	35.00	75.00

18/ See Appendix B. Check Sheet.

A comparison of the group before and after rehabilitation is shown in Table 14 and provides the above measures of statistical distribution.

The preceding figures show that for the group as a whole the minimum salary was increased $12.00 weekly, the average $12.66, and the maximum $40.00. The growing rate of increased differences as one approaches the maximum salary for the group at the two different times may be indicative of the constancy of individual differences within the group even under varying general conditions for all the individuals concerned. In regarding the "before and after" figures several interesting items are worthy of note. For Case Number 13, Table 15, for example, as well as for Case Number 32, the weekly salaries were identical in all four instances. In the former case relevant vocational training was provided which should gradually manifest its wholesome influence on her occupational status with the passage of time since she was placed in a position for which the job training was designed. Case Number 32, Table 13, was one for whom counseling only was provided. It was felt that as a result of such counseling he will be better prepared for future occupational success.

Case Number 36, Table 15, is one which has been previously discussed under physical restoration. Here the question was not one of improvement in wage earning capacity so much as one of maintaining his existing ability

Table 15.--COMPARATIVE SALARIES BEFORE AND AFTER REHABILITATION.

Case No.	Average weekly salary before rehabilitation	Average weekly salary after rehabilitation	Case No.	Average weekly salary before rehabilitation	Average weekly salary after rehabilitation
1	$ 0.00	$12.00	21	$ 0.00	$20.00*
2	0.00	25.00	22	0.00	30.00
3	0.00	35.00	23	35.00	29.00
4	0.00	30.00	24	0.00	26.00
5	0.00	35.00	25	0.00	25.00
6	25.00	60.00	26	0.00	50.00
7	0.00	54.00	27	0.00	22.50
8	0.00	25.00	28	0.00	50.00
9	0.00	75.00	29	15.00	35.00
10	0.00	30.00	30	35.00	40.00
11	0.00	35.00	31	3.00	45.00
12	0.00	18.00	32	20.00	20.00
13	20.00	20.00	33	0.00	20.00
14	0.00	35.00	34	0.00	44.00
15	0.00	50.00	35	0.00	35.00
16	12.00	20.00	36	30.00	30.00
17	0.00	35.00	37	0.00	50.00
18	0.00	20.00	38	0.00	25.00
19	0.00	40.00	39	0.00	28.00
20	0.00	30.00	40	0.00	60.00

*Plus room and board.

to retain his employment without aggravation of the impairment or injury to his general health through renewal of prosthesis.

The classic exception to all rules is embodied in Case Number 30, Table 15. To "rehabilitate" a man from $35.00 a week to $29.00 a week does not appear to be the best of rendered services. It was, nevertheless, one of the better placements made because, as was described under the section on physical restoration, his terminal employment was in a job which was compatible with his disability while the initial employment was detrimental to his health.

Case Number One, Table 15, deserves regard by virtue of the small terminal wage. Here again is a claimant for whom rendered service has not begun to reveal itself in realized economic benefits as yet. Tradition has it that the artist must starve in a garret for many years before he can receive public acclaim and indeed he may need to suffer and even die in obscure poverty and destitution prior to becoming a figure of international renown. While the counselor most assuredly does not believe in the necessity for such a period of travail as a prerequisite to artistic immortality he would be assuming an unrealistic attitude did he not recognize the difficulties inherent in the marketing of canvasses by an unknown artist.

The observing student of the affairs of the

disabled will undoubtedly be struck by the numerous relatively small salaries compiled above. One must remember, however, that most of these positions were found in small communities where living costs are customarily lower than in metropolitan centers. Another thought which should pervade the consideration of the pictured figures above is the "single-blessedness" of those in the lower income brackets. Their family needs are modest in comparison with those essentialities of the man with a large "entourage" on his way through economic life. Another datum which surely enters the scene is the fact that these are starting salaries and no one could logically expect in the ordinary course of events that they would remain immutably fixed but rather could be expected to grow with the vocational development of the embryonic employee.

The startling disparity between the "before and after" figures is a salient testimonial to the unrealized potentialities of the group prior to rehabilitation. The greatest differential of from zero to $75.00 a week is one of the startling manifestations which evolves when the true worth of an individual receives its just acclaim. Case Number Nine, Table 15, had demonstrated his value in the economic scheme of the occupational world prior to his incurrence of the disability in an industrial accident which ruined his powerful physique insofar as heavy labor was concerned.

The claimant had been receiving a weekly stipend of $25.00 for compensation of injuries incurred in a compensable accident. This meager weekly income was insufficient to maintain his wife and three children and it was also inexorably eating into the total sum he was awarded for the injury. John then conceived the simple but eminently practicable scheme of converting his residual award into a lump sum settlement. Then he proceeded to borrow on the strength of this collateral, sufficient additional funds to purchase a Diesel "tractor" and trailer to haul corn from Nebraska to one of the largest cattle feeders in the world who is located in northeastern Colorado. On the return trip he planned to haul wheat from Colorado to shipping points in Nebraska. The actual implementation of the conception, however, required a great deal of discernment and acuity on the part of the claimant. First of all he had to find a consistently dependable market for his transported wares. His discerning judgment and judicious decisions enabled him to achieve this formulated objective wherein many an experienced "transfer man" had failed. Then on the strength of the word of the cattle feeder whose pledged word is actually a negotiable instrument, it was possible for him to borrow the requisite additional sum to initiate the purchase of the transportation equipment. He unfailingly took into consideration the coincidentals which can so swiftly and unexpectedly bring ruin and

desolation to any business venture. The insurance policy posed a difficult problem but it was solved in his typically ingenious manner. The question of getting a permit to operate was also anything but easy of solution. The wise purchase of the proper equipment at the lowest cost consistent with the desired quality was another perplexing factor. And, decidedly not least, was the obtaining of permission from the compensation commission to convert his award into a lump sum settlement, to say nothing of the universal difficulty encountered by employers in engaging satisfactory employees. That he solved these problems, which plague the production executives of America, in a personally satisfying way is a silent tribute to his ingenuity, persuasive power in dealing with others and his conception of this business "ideal" with such insight and meticulous foresight for each detail. His success was surely deserved.

Case Number 31, Table 15, should perhaps be recalled to the attention of the reader again. The huge increase in weekly earnings was partially due to the conversion of a part-time job into a full-time position and also due to the change from clerical work to the profession of teaching made possible by the vocational training which was paid, in part, by the local rehabilitation agency.

In general it might be said that the more of the services rendered by the agency the more suitable was

Table 16.--CLASSIFICATION OF CLIENTELE ACCORDING TO EMPLOYMENT HISTORY AND SALARY CHANGES AFTER REHABILITATION.

Case No.	Employment history	Prior to rehabilitation			After rehabilitation	
		Employment status	Type of position held	Weekly salary received	Type of position held	Weekly salary received
1	Substantial	Unemployed			Commercial artist	$12.00
2	Part-time	Unemployed			Truck driver	25.00
3	Substantial	Unemployed			Painter	35.00
4	Substantial	Unemployed			In ladies shop alteration department	30.00
5	Substantial	Unemployed			Farm hand	35.00
6	Substantial	Employed	Laborer	$25.00	Lawyer	60.00*
7	None	Unemployed			Laborer-sugar beet factory	54.00
8	None	Unemployed			Hostess in tea room	25.00
9	Substantial	Unemployed			Truck operator	75.00
10	Part-time	Unemployed			Linoleum layer	30.00

*Change in residence after rehabilitation.

Table 16.--CLASSIFICATION OF CLIENTELE ACCORDING TO EMPLOYMENT HISTORY AND SALARY CHANGES AFTER REHABILITATION.--Continued.

Case No.	Employment history	Prior to rehabilitation			After rehabilitation	
		Employment status	Type of position held	Weekly salary received	Type of position held	Weekly salary received
11	Part-time	Unemployed			Auto mechanic	$35.00
12	Part-time	Unemployed			Auto mechanic	18.00
13	Part-time	Employed	Secretary	$20.00	Bookkeeper	20.00
14	Part-time	Unemployed			School teacher	35.00
15	Part-time	Unemployed			Watchman	50.00
16	Part-time	Employed	Yard man and gardener	12.00	Yard man and gardener	20.00
17	Substantial	Unemployed			Watch repairman	35.00
18	Part-time	Unemployed			Farm hand	20.00
19	Part-time	Unemployed			Dietitian	40.00
20	Part-time	Unemployed			Ranch hand	30.00
21	None	Unemployed			Farm hand	20.00*
22	None	Unemployed			Laboratory tester	30.00**

*plus board and room
**change in residence after rehabilitation

Table 16.--CLASSIFICATION OF CLIENTELE ACCORDING TO EMPLOYMENT HISTORY AND SALARY CHANGES AFTER REHABILITATION.--Continued.

Case No.	Employment history	Prior to rehabilitation			After rehabilitation	
		Employment status	Type of position held	Weekly salary received	Type of position held	Weekly salary received
23	Substantial	Employed	Laborer	$35.00	Body and fender man	$29.00
24	None	Unemployed			Stenographer	26.00
25	None	Unemployed			Beautician	25.00*
26	Substantial	Unemployed			Mine machine operator	50.00
27	Substantial	Unemployed			Clerk-typist	22.50
28	Part-time	Unemployed			Dump truck driver	50.00
29	Substantial	Employed	Filling station attendant	15.00	Owner-manager filling station	35.00
30	Substantial	Employed	Linotype operator	35.00	Linotype operator	40.00
31	Part-time	Employed	Clerk	3.00	Teacher	45.00*

*change in residence after rehabilitation

Table 16.--CLASSIFICATION OF CLIENTELE ACCORDING TO EMPLOYMENT HISTORY AND SALARY CHANGES AFTER REHABILITATION.--Continued.

Case No.	Employment history	Prior to rehabilitation			After rehabilitation	
		Employment status	Type of position held	Weekly salary received	Type of position held	Weekly salary received
32	Substantial	Employed	Farm hand	$20.00	Farm hand	$20.00
33	None	Unemployed			Farm worker	20.00
34	Part-time	Unemployed			Laborer building construction	44.00
35	Substantial	Unemployed			Lineman Bureau of Reclamation	35.00*
36	Part-time	Employed	Gardener and yard man	30.00	Yard man	30.00
37	Substantial	Unemployed			Owner-manager apartment	50.00
38	Part-time	Unemployed			Negative retoucher	25.00
39	Part-time	Unemployed			Bookkeeper clerk	28.00
40	Substantial	Unemployed			Radiator repair	60.00*

*change in residence after rehabilitation

the final placement of the claimant. In other words, "you get what you pay for."

Spatial limitations prevent the complete discussion of each case but the tabular arrangement of employment history at the time of survey, the employment status at this time and weekly salary received in comparison with respective data after rehabilitation in addition to any change in location of client shown in Table 15 may offer fruitful suggestions for future placement 19/. The relationship is shown in Table 16.

A glance at the tabular presentation of data clearly shows the scarcity of "moved" individuals. This policy is one which enjoys widespread support among rehabilitation workers. Wherever possible this thought has been converted into realistic action. Unnecessary uprooting of well-adjusted claimants is never undertaken.

The subsequent arrangement of figures is thought to be self-explanatory in nature. For those employed at the time of the survey it will be noted: that Case Number Six converted his vocational endeavor from labor to law; that Case Number 13 changed from secretary to bookkeeper; that Case Number 23 switched from labor to body and fender work; and that Case Number 31 altered from clerk to teacher. Otherwise no change in occupations among those employed at the time of survey before and after rehabilitation occurred. For those few employed cases which

19/ See Appendix B. Check Sheet.

changed after service was rendered by the agency a trend into the white collar professions might be sensed. The increase in realized wages resulting from changes in occupation was magnified in the case of Number 31, at least, by his also converting from part-time to full-time employment. The trek into the white collar professions by the impaired has long been evident and will probably continue so long as other professions and trades require heavy manual labor or exquisite manual dexterity or other unimpaired apperceptive sensory organs. Insofar as the claimants with a chronic contagion akin to tuberculosis are concerned, sanitary measure to protect the public from infection will probably always remain in force. Naturally, when the client has been declared an apparently arrested case and is released by competent medical authorities the situation is somewhat altered.

Once again the individual nature of the problem of vocational rehabilitation, as stressed by the client who is typically a deviate from the norm, is difficult to classify and pigeonhole. Perhaps the only reason why six claimants were listed as "farm and ranch hands" is because the term is so all-embracing. The program is properly centered around the individual rather than attempting to force the individual to conform to any pre-conceived program or rigidly formulated policy.

Methods used in following the training program and placement of clients

Local employment opportunities are always given first consideration, provided, of course, that they offer suitable placement in an occupation compatible with the disability. It is obviously futile to uproot the handicapped from the locality they have come to know as home and to exile such a one from his friends and transfer him to a strange environment where his tendency to timidity may create an unhappy atmosphere of desolation, if a suitable position can be found in his native community. It is perhaps just as foolish to leave him to vegetate and wither away in a situation in which his chances for economic independence and civic maturity are minimized by lack of local training facilities. It is the function of the agent to strike the grounds between the extremes pointed out above.

The agent must practice the most effective type of guidance. He leads, but from a background position, in the placement of claimants in remunerative positions in occupations compatible with the individual disability.

The counselor must keep in mind that responsibility for the actual implementation of the program, both training and placement, is a delegated function. Cooperation with existing agencies is an essential for complete and lasting success in vocational rehabilitation.

Chapter V

DISCUSSION

Studies of the past embraced the factors to be considered in direct and indirect placement, the virtues of vocational training and the advantages conferred upon the disabled by physical restoration. The genesis of inseparable psychological conceptions which emerged from the consideration of these factors impelled their rather replete discussion. The singular nature of these psychological interrelationships between society as a vocational entity and the noticeably impaired as social outcasts was thought to have sprung from the dim recesses of unwritten history and to have achieved immortality in the process of passing from one generation to the next down through the corridors of time. In this historical manner was presumably developed a major bar to employment faced by the visibly disabled of today.

This evil of injustice which tainted the humanity of mankind, being essentially an unconscious attribute and consequently deeprooted, pervaded the vocational world of yesteryear. It thereby became necessary to indulge philosophically in socio-economic and legislative developments of human endeavor to portray in faithful detail the picture that generally prevailed

in times of distress for labor. The glowing exceptions to this atavistic tendency were by no means extraordinary and their presence portended a happier future for the disabled during periods of depression.

In the intervening years, however, a realistic attitude toward superstitious regard for abnormalities steeped in ignorance of their origin was assumed by professional workers in the field of vocational rehabilitation. Emotional imbalance among the visibly impaired logically entailed by their rejection by society was construed by certain authorities to be an extremely palpable factor in denying to them otherwise suitable employment. To those gathering and assembling information of this segment of the population during the present and preceding eras these seemingly extraneous, but actually germane considerations, could not be ignored in attacking the problem.

In the metropolitan areas of today wherein function the vast factories of the iron age, specialization of endeavor, so intimately a part of mass production, has certainly done much to dispel those superstitions of another day which may still persist. For, in definitively assigning to designated individuals tasks of high specificity, the physical perfection of body lost status as a production necessity. Although, for example, the monotony of performance on an assembly line did not intrigue labor generally it made possible openings for

the disabled. Where all one needs do, for instance, is screw a nut on a bolt from a stationary position the use of feet and legs lose much of their occupational significance.

In small rural areas of today which generally prevail in Northeastern Colorado and which were so typical of America in the early years of the Nineteenth Century, however, mass-production methods have failed to find a vocational haven.

Since the individual is the basis upon which any program dealing with humanity must be founded, the counselor has, perhaps not illogically, considered the vocational problem of the disabled individual, to which this study is devoted, to comprise as its primal consideration the physical capacities appraisal of the impaired. The ensuing regard for the physical demands of a given job or a group of jobs was thought to be of secondary importance and is, in the thinking of the agent, to be moulded by the attributes of the individual concerned. In this manner the danger of intellectualized stereotyping of the particular impaired on the basis of vocational opportunities was thought to have been dispelled.

The regard of the individual as being supremely important is a fundamental concept of this treatise, and all efforts to gather data pertaining to the study were so directed with this principle as the guiding star. In

these efforts to secure relevant information of the disabled, as a rehabilitation agent in the field, the counselor discovered that the only informational channel through which reasonably accurate first-hand information of practicable value could be obtained was the Vocational Rehabilitation Division of the Colorado State Board for Vocational Education.

Types of handicapped individuals referred to vocational rehabilitation agency in Greeley.

The type and severity of an impairment construed to be a vocational handicap will always constitute a problem. The moot question of eligibility for the services of the rehabilitation agency by the disabled contains a number of imponderables when one views the entire panorama of debilities sustained by the residents of Northeastern Colorado. Subjective opinions of the individuals concerned and of those referring the individual with a disability to the Greeley office comprise one of the variables which fluctuate from time to time and from person to person. In fact, the opinion of the citizen with a trivial impairment itself may evolve into a qualifying psychoneurotic handicap.

Therefore, the diagnosis of the referred individual may always be questioned not only for the above reason, but also because it is a matter of categorical opinion. Is one with tuberculosis of the bone

classified as an orthopedic or is he considered tuberculous? Is the arthritically deformed individual an orthopedic case? Should the diabetic be embraced by the miscellaneous classification or does the widespread incidence of this debility justify the creation of a separate "alcove" for its inclusion?

The increased number of referred cases listed under each classified diagnosis during the fiscal year 1947 does not necessarily reflect a spreading trend of the specific disability involved. It may merely imply either the discovery of existing but unreported cases through an increased awareness of the possession of such impairments made possible by better diagnosis or the growth of a wider knowledge of the rehabilitation agency.

While the acoustically impaired cases comprised only a small percentage of the total number of referrals, they have revealed an absolute and percentagewise increase of comparative consequence during the fiscal year, 1947. Because this is so, one might be justified in saying that either environmental factors, including disease most decidedly, or hereditary tendencies are becoming more and more serious as incurring agents for loss of hearing.

The increased mechanization of agriculture and other vocational fields in the area may be held accountable for much of the aggravation in impaired

hearing. The continual din which assails the ears of the visitor to a machine shop or those of one in the driving seat of many a tractor is most certainly not conducive to the development of acoustical apperception.

When prolonged over the years, its deleterious influence on the residual hearing of the individual seems obvious to the counselor. A congruent hypothesis which appeals to the historian might be formulated upon this assumption, and that is, the possibility that keen hearing has lost status among the vital sensory organs of mankind in that individual dependence for existence no longer must rely on eternal vigilance.

The absolute and percentagewise increase in cardiological debilities may be attributable in part to medical inability to discover a specific remedy for rheumatic fever--the scourge of youth in many communities through its sequel--the impaired heart. The above finding is contrary to popular opinion that "heart trouble" is merely symptomatic of senility, which is patently growing in statistical significance through medical advances in combatting the diseases of youth and early adulthood. The aged segment of the population is usually eligible for the old age pension or has individually amassed sufficient financial resources so that employment is neither needed nor desired.

The percentagewise reduction in orthopedically disabled individuals referred could be construed to be an

adulthood manifestation of reduction in birth injuries as well as early remedial attention to congenitally incurred physical defects of a generation ago. The modern school of obstetrical science does not countenance the promiscuous use of instruments for delivery. A classical example of the pathos which evolves from the imprudent usage of instruments to facilitate delivery occurred near the turn of the century. A bumbling old Texas doctor was called in to assist in the birth of twin girls. The one fortunately escaped mutilation and lasting injury to her mind and body. The other, however, was not so fortunate. Her parents exhausted their very considerable fortune in taking the girl from one specialist to another in vain hope of redeeming her physical faculties which had been taken from her by the mechanical talons of "delivery." All the specialists could do was to castigate the old Texas. The sadly ironical thing about her being unable to talk or walk or use her hands was the possession of her wonderful mind. Its presence was indicated not only by the implication of her intellectual twin and intelligent parents, but also by her evincing of intelligence through certain signs she was able to devise. Within her paralyzed and mute body there existed a human soul but its inability to normally transmit its messages to kindred souls placed it in the solitude of desolation. In the meantime, her talented sister had mastered the lovely Moonlight Sonata

and such somber and haunting compositions as Rachmaninoff's "Prelude in C Sharp Minor," which she was later to play before enchanted audiences. The happy sequel of her marriage was crowned with the joy of motherhood.

Either of two, or a combination of two, possibilities may account for the slight percentagewise increase of arthritic referrals during the fiscal year, 1947. Improved methods of diagnosis may be a revelation to those not previously aware of the nature of their affliction, or the supposition that Americans are not eating right may be a factor of incurrence, since there is also some evidence to support the suspected cause of this impairment in faulty diet.

The famed curative qualities of Colorado climate for the tuberculous may ironically account for the increased incidence of the malady during the last year the records were studied. The influx of these disabled persons constitutes an increment in the source of contagion prior to their recovery of health and is conducive to the spreading stain of pulmonary tuberculosis among susceptible residents of the area.

The miscellaneous "alcove" of classification was arbitrarily designated by the counselor to comprise all other debilities to which mankind is subject. Its percentage of the total number of referrals receipted by the local rehabilitation agency during the fiscal

year, 1947, and during all the preceding years, is a revelation of human fragility and of the many environmental and congenital factors of debility which "prey" upon the vulnerability of individuals.

Referral sources are the "staff of life" for a rehabilitation agency initiating operations in a new territory, and they certainly were helpful in the establishment of the local agency in Greeley during the fiscal year, 1946. Furthermore, the records kept by the agency as a state-wide concern were vital to the successful venture of the Greeley office. But, as a <u>local</u> agency serving Northeastern Colorado, the Greeley office flourished, in a large measure, through the cooperation accorded it be referral agencies. The value of referral agencies is multiple in nature. For, in addition to providing the local rehabilitation agency with the names of prospective clientele and the diagnosis of disability, they also afford a clue of clientele location.--"You've got to find them to help them." Then too, a permissive entry into the confidences of the client may be made possible by such a source. One of the most poignant feelings of helplessness ever experienced by an agent is to observe an individual with an obviously remedial disability, such as a "locked knee", unnecessarily hobbling through life on crutches. Occasionally, of course, one may "bull" his way into the affairs of the disabled, but ordinarily this procedure is not a

satisfying one. A proper introduction of a permissive sort is more conducive to genuine rehabilitational success.

Situation prior to initiation of rehabilitation measures

The difficulty of appraising the extant situation at the time of the survey was delineated in the previous chapter and for reference to relevant statistics one should consult the counterpart of this chapter in Chapter IV.

The indigent disabled at the time were usually wards of society. Their inability to capitalize on and exploit their potentialities in economic endeavor had compelled them to seek sustenance from the various county departments of public welfare or, in a few instances, from individuals upon whom some claim or family tie was binding. That they were deserving of a better fate by virtue of their potentialities and willingness to achieve will be shown after rehabilitation by their engaging in remunerative employment.

Even among the employed disabled before rehabilitation the maximum and average weekly wages were unjustifiably low while the minimum was a mere pittance. A much more reasonable approximation of their economic potentialities was revealed after their establishment in productivity in occupations compatible with their disabilities.

It must always be remembered that only those sustaining qualifying impairments came within the scope of rehabilitation and that many a disabled man had rehabilitated himself, which is the best kind of rehabilitation there is. Just because no reference is made to those valiant individuals, it must not be inferred that they are forgotten. The principle of the "wheel that squeaks the loudest gets the most grease" often has the justification of expediency. For example, occupational maladjustment of the impaired may be the determining factor in the establishment of eligibility for two individuals with "identical" disabilities in different vocations. The loss of a leg might be a fatal blow to the occupational success of a mailman while it might only spur the office worker to new heights of professional attainment.

The perplexing question of what impairment constitutes a vocational handicap necessitates the "individualizing" of rehabilitation and particularly placement. A generalized approach to the employing public is bound tc fail because in the first place the agent is unable to provide a specific answer to the logical question posed by the prospective employer, "Who is a vocationally handicapped guy?". It is the personal conviction of the counselor that many unorganized programs of rehabilitation fail for just that reason, and their failure may have materially contributed to the

dark hues in which the vocational picture of the impaired was painted at the time of the survey.

A correspondingly fallible assumption, in the opinion of the agent, is that which presumes the primary importance of the local employment situation in the scheme of vocational salvation. There are many who hold that if no employment opportunity exists in the home community for the badly disabled, it is cruel and heartless and futile to uproot him and separate him from his friends to train him in a metropolitan area where adequate training facilities are available. It is true, however, that unwise and imprudent decisions here may indeed be vocational folly and entail much heartache among the displaced.

Good judgment is as necessary in rehabilitation as elsewhere, and the following discussion is primarily concerned with the application of "horse sense" to illustrated vignettes to whose consideration the attention of the counselor was officially drawn in his daily performance of duty at the time of the survey.

The field of commercial art is, insofar as local markets are concerned, a rather poor one in which to seek economic gain. A cursory examination of the area involved would seemingly support this hypothesis. The area is sparsely settled and is devoted primarily to agricultural pursuits with some mining and a few scattered industrial enterprises of small magnitude found

here and there. Large advertisers who supply the life blood for commercial art are conspicuous by their absence. There may be a market among the tourist trade, but the difficulty entailed insofar as the individual artist is concerned is the lack of a convenient and economical way of contacting them. Vending through a third party is costly to the artist and the competition with cheap "factory-made" photographs and pictures lower the price he receives for his creations into the "coolie-labor" rate.

The occupation of truck driving offers more promise provided the claimant can meet the physical demands of the job. The salary is comparatively high but so are the expenses of travel which goes with the job. Long hours and sometimes irregular meals and occasional sleepless nights are also a part of the job which require an unusually sturdy constitution to endure over a prolonged period of time. But the opportunity is indisputably there for those who can qualify. The vast expanse of territory and distances to shipping points from remote communities necessitate a large amount of truck transportation of agricultural produce and mined material, particularly coal and also some gas and oil.

The acute housing shortage, which appears to be chronic for years to come, provides an incentive for entry into the building trades, if one can qualify for employment. A powerful physique and relatively acute

visual apperception are often involved as well as good hearing ability. For those whose eyesight and general health are adequate, opportunities for competition in the lighter phases of this trade are available. The arrested tuberculous should approach this field with caution, however, as should the asthmatics and the sufferers of bronchiectasis. Irritation of the mucous membranes from paint fumes may become a serious matter.

Dress design and alteration of feminine wearing apparel has possibilities for a number of impaired women. Good eyesight is a necessity, corrected or uncorrected, because severe eyestrain is normally one of the penalties of the profession. A pair of facile and dextrous hands are also ordinarily required for this endeavor and sometimes an attractive appearance is deemed essential. The work is frequently of a sedentary nature, however, and for the woman without great physical endurance it may provide a vocational haven.

The geographical aspects of the studied area are favorable to agricultural pursuits. Many who are qualified to do this work find it personally satisfying to them in that social contacts can usually be avoided if they are a source of pain and heartache to those with noticeable impairments. A word of caution should be offered the city-bred individual who is entranced by the romance of the range. He is likely to find that the glamour of the out-of-doors is accompanied by a lot of

hard, monotonous uninspiring work.

The profession of law is advantageous to the disabled as a vocational endeavor because it is a sedentary occupation. However, a good pair of eyes is often necessary because of the arduous research into legal records. Another very practicable item which may cause one to hesitate is the long and expensive training course involved and the traditionally slow progress to ascension in the profession. One may need rather substantial financial resources to weather the travail of becoming "established" and of developing an adequate clientele.

Labor in certain fields may offer suitable placement for some types of impairments. A deaf man with a sturdy body might perform certain manual work. The occasional mentally retarded case with a physically normal body may be a satisfactory employee in some conditions. Certain emotionally disturbed individuals may find an outlet for their repressed desires in physical exertion. Here, of course, the physical condition of the claimant is paramount, and the physical demands of the job are always important. In this particular area the demand for labor of one sort and another is rather heavy. Mining, forestry, and farming are traditionally noted for the physical endeavor they require.

A limited field for certain feminine claimants

may be discovered in tearoom work and cafes and restaurants. The exertion is frequently more than anyone but the physically normal woman can persistently endure. Impaired hearing is usually a disqualifying factor, but when corrected with a good instrument it may not be a disparaging factor to suitable employment.

Linoleum laying may be a good profession for epileptics since the only such claimant in the sample who secured the job was an epileptic. The possibility of injury from an unforeseen seizure is always there, but this is true of nearly all life. There are most certainly some occupations in which the possibility of harm to the afflicted is greater than in others, but linoleum laying appeared to be as free from this danger as most endeavor in which the client was qualified to enter.

The area of employment in which auto mechanics function has been a good field for the entry of certain disabled individuals. Quite often an impaired facility of the lower extremities does not preclude one from engaging in this activity on a competitive basis with the able-bodied.

For the man with a speech defect, a hearing impairment or debility of the hands, body and fender work can be handled by the disabled individual with relatively little oral instruction and poor enunciation loses its stigma in the acoustical "chaos" of din and thunder of

machinery. Since the tools are large and do not require fine motor skills, the weakened or insensitive or partially missing hand may get the job done, and done exeeptionally well. This is one of the very few occupations commonly found in this section of the State wherein the hand is not primarily of vocational importance.

Radiator repair work has proven to be remunerative. The extensive mechanization of many agricultural enterprises has provided a demand for this service and the necessity for personal transportation from one remote point to another has brought home to the residents of the studied area the need for automobiles in large numbers and the necessity for keeping them in good condition.

The clerical vocation has traditionally been considered a port of refuge for the impaired and not without reason. The sedentary aspect of this employment will always be a point in its favor. It is one of the occupations in which the impaired have successfully competed with the able-bodied for employment for many years. Its drawbacks are its frequent low pay and long hours. But in this area more bookkeeping jobs than "accountancy" positions may always be found because industrial enterprise and business organizations probably will always be comparatively small. All too often, however, heavy physical labor is included as a part of the

essential duties of the position.

School teaching as a profession is not always an open door to economic independence. Many superintendents and school boards consider the possession of a noticeable physical impairment as disqualifying attribute. Other than this atavistic attitude, however, teaching has much to offer. Where incidental duties do not involve strenuous endeavor it often challenges the handicapped to overcome and beat down public refusal to accept such a one. When the disabled can do so they gain immensely in self-prestige and are ready for more and more difficult assignments.

The duties of a watchman or guard are sometimes ideally suited for certain types of handicapped individuals. The poliomyelitis victim, when not too badly disabled, may perform these duties in an admirable fashion. The gardener and yardman are occasionally claimants. Celerity in getting the job done may not be nearly as valuable to the employer as dependability of performance which comes from a "labor of love" and a genuine interest in doing the job right, which was once called pride in workmanship.

The craft of watch repair has aided many a claimant to reach self-support in employment. Fine motor skills and excellent eyesight are the two requisites, plus excellent intellectual ability to grasp and absorb mechanical knowledge. The man in the wheel chair is a

rather common sight in this vocational art, and ability to do the job is the sole criterion upon which employment is predicated. The question is starkly simple, "Can you fix my watch?", the shape or size of the repairman is absolutely irrelevant to the point at issue.

The dietitian along with the medical technologist and clinical laboratory technician offer a limited field for the intelligent girl who has an overpowering desire to be a nurse or doctor but who lacks the physical stamina to carry through the long and arduous training period and who may be unable to meet the heavy demands made upon her physical energy by the work entailed in the practice of the profession of her desire.

The stenographer, secretary and clerk-typist provide sedentary positions for the man or woman who has the special skills demanded and who can accept and flourish under a regime of office routine. Monotony may be one of the things with which the rehabilitant may have to cope but in small offices the variety of business transacted may preclude this "sameness."

Beauty salons have long been a vocational haven for disabled girls. A consideration often ignored by girls who are intrigued by the glamour of the profession is a rather "stiff" training course which precedes a difficult examination that must be passed prior to entry into the occupation.

The opening of a mine machine operator position

for a disabled claimant revealed whole new vistas of employment "panoramas" to the counselor. The oft-quoted bar to employment in a mine or other industry "our insurance policy prevents our hiring the handicapped" is slowly being exposed as a defense mechanism by company officials who do not wish to accept the responsibility for their decisions to reject the impaired.

For the genial and cordial claimant the operation of a filling station has possibilities. The most important virtue one must have is the ability to meet the public. But one must also be willing and able to keep a set of simple records and compile transactions of the business of the day. Certain physical demands must be met or these duties delegated to another. In the latter instance managerial ability comes into play.

The owner and manager of an apartment house is an ideal position for certain handicapped individuals, but a large amount of capital or access to practically unlimited credit is a pre-requisite to engagement in the profession and the qualities of the entrepreneur are desirable and often necessary.

The linotype operator may be an impaired person in many of the newspaper shops throughout the area. Sometimes special arrangements can be made to permit one with a certain type of disability to function effectively. A light may be substituted for a warning bell in the case of the deaf. A specially designed stool may enable

certain of the orthopedics to perform the required duties in comfort.

Negative retouching is one vocation that seems to have been especially reserved by Providence for the homebound claimant. The principal quality sought by the employer appears to be perseverance and faithful attention to microscopic detail. The infinite patience and enduring persistence, which is evident in the one-armed man who may when necessary spend 30 minutes to button his cuff, was exemplified by the late President Roosevelt who when he was complimented on his patience and determination, replied somewhat as follows, "When it takes two years to learn to wiggle your big toe you have to learn patience." But of more practicable concern to the impaired is the fact that once the skill is learned, the work can be carried on entirely by correspondence.

The visually impaired often have poor prognosis. Where this is so and the impairment is rapidly progressive in cumulative seriousness, clientele are usually referred to an agency which specializes in the affairs of the blind. The responsibility of assisting the blind is delegated by legislative statute in Colorado to this agency and is by legal definition consequently of little professional concern to the office of vocational rehabilitation in the state.

Where a claimant is found to possess one disability, he may often find that he also has one or more

accompanying disabilities. The multiple nature of the disability is another of the difficulties which impede classification of vocational handicaps. In general, however, the more seriously incapacitating of the two of more impairments sustained by a given individual is the classified diagnosis, insofar as vocational handicap is concerned.

It is here that a minor physical defect may become the basis for a vocational handicap. Through improper medical interpretation the "debilitated" may come to feel and feel sincerely that his disability is a very serious and incapacitating one. Such a "psycho-neurotic" often is actually handicapped in the quest for employment and may feel impelled to resign from whatever position he does finally accept through honest fear that the occupation in which he is engaged may be incompatible with his disability and therefore deleterious to his health.

Where a visible or noticeable impairment is sustained by the individual the attitude of much of society toward that person is one of toleration rather than one of acceptance. There appears to be a feeling in certain quarters that the possession of such a debility is dishonorable and a badge of incapacity and this attitude is conveyed to the handicapped person which in turn creates within him a feeling of frustration by virtue of his failure to be accepted or to have "status."

Emotional imbalance is then added to his physical incapacity as an employment handicap.

Those who have sustained impaired hearing or speech impairments constitute a special segment of the vocationally disadvantaged which is a seriously handicapped one. Where the loss in facility for oral thought transferrence and social intercourse is noticeable and irremedial or uncorrected, one is in an unenviable position, irrespective of his mental attainments or other attributes. Insofar as speech defects are concerned, the limited experience of the counselor would tend to bear out the thought that superior intelligence does not have a significantly positive coefficient of correlation with such speech defects.

However, insofar as the deaf and hard-of-hearing are concerned, the experience of the agent has been very different; the outstanding example of which is discussed in the following paragraphs.

One of the elderly gentlemen with whom the writer has been intimately associated for several decades has been very hard-of-hearing for 60 years. It is true that if one were to try to carry on a conversation with this old gentleman when his ultra-modern instrument is turned off he might assume that he was not very intelligent. However, this gentleman of the old school is probably the most intelligent individual the counselor has ever been privileged to know. His vocabulary is

extensive, and the agent has reason to know, for he has never been able, in all the years of their mutual association, to "stump" this classical Greek and Latin scholar with a word of unusual meaning. His bilingual mastery of the dead and living languages of history is surpassed only by his practicable knowledge of Spanish and English. The fact that he was also one of the physical marvels in the world of collegiate sports in the "mauve" decade did not enhance his chances for vocational success in any larger measure than did his supreme intellect. Impairment of the acoustical faculty precluded his towering above his fellows in the vocational area of human endeavor although he surely held his own. Now that this grand old man is nearing the end of his earthly trail he has been endowed by an ironic fate with normal hearing through physical restoration made possible by electronic advancements in acoustical instruments.

The point at issue is the barrier placed in the path to occupational success by irremediable loss of facility in oral communications.

Another disadvantaged group for whom precautions in rehabilitation must often be observed is the tuberculous. Without proper supervision by a qualified medical practitioner disheartening relapses into active pulmonary tuberculosis are encountered with disconcerting regularity.

The situation prior to survey insofar as the

orthopedically impaired are concerned was a variegated one. Some were relatively well situated but others, who were in the preponderant majority, were undergoing unhappy experiences.

A description of the remaining various diagnosis of disabilities and their vocational implications was precluded by spatial limitations and the next aspect of the situation as it existed prior to the initiation of vocational rehabilitation measures was the interrelationships thought to exist between various attributes of the disabled and employment and employability status.

A careful examination of the various facts relevant to the disabled and their employment and employability status failed to disclose any clear-cut issues insofar as interrelationship or mutual interdependency of these attributes was concerned. Every inferential supposition made by the writer in Chapter IV remains just that. Hypotheses of various sorts were predicted upon fragmentary and incomplete statistical bases. Among the theories so tentatively formulated which appear to the counselor to hold the most promise of validity and reliability are the following contemplations of the situation at the time.

The employed segment of the sample was somewhat more mature than its unemployed complement. This was particularly true of the younger members of the employed group in comparison with the youthful unemployed.

The opportunity for the employed members to have accrued more experience and vocational training by virtue of their having lived longer is a distinct possibility. Therefore the occupational value of their formal education was questioned since each group had somewhat similar educational backgrounds. The possibility that continued efforts over a prolonged period of time might enable the youthful disabled eventually to "land" a job was also considered. Many of the members of the employed group may have also been unemployed when they were the age of the youngest unemployed.

The small percentage of the employed group having sustained accident-incurred disabilities was presumably predicated upon employer fear of "second-injury" claims by the prospective employee. This old "bug-a-boo" which has often been conjured by employers when interviewing disabled applicants stems from the dread that if an impaired employee sustains a second disabling injury for which the employer or his insurance agency is liable, the employer, or the one to whom such responsibility is legally delegated, may be held liable for both the first and second injury. Despite the fact that such suppositions are irrelevant insofar as Colorado is concerned, their regard by employers is undoubtedly detrimental to vocationally handicapped individuals.

The very considerable benefits which have been enjoyed by the poliomyelitis victims through the

publicity and financial support from public contributions to various funds have placed this group in a relatively enviable position among the impaired. The spastics, the epileptics, and other obscure groups have not fared so well.

The classification of clientele by origin of disability was of particular interest insofar as those with impaired acoustical apperception were concerned. The congenital nature of a hidden hereditary debility which is evidenced in puberty and late adolescence has always fascinated the counselor. He once heard a doctor say that the adolescent and young adult who are mysteriously stricken with rapidly fatal cancer are doomed at birth, that early death itself is hidden in the lusty young infant. To a less dramatic and less poignant extent but in just as authentic a manner is evidenced this inherent failure of the newly created auditory faculty to endure throughout life. The father in Case Number 18 is a classical illustration of the transmission of this <u>imprimis</u> unfathomably and indiscernibly inchoate impairment from father to son and which manifests itself in later life. The father gradually and irrevocably lost his hearing, having sustained a total loss by the time he was 44. The transmitted disability became a reality to the son at the youthful age of 16 and within a few short years his hearing ability will inexorably recede into complete deafness. As one might guess the impairment

is neural in nature, and its redemption is beyond the reach of present-day medical science.

The relatively large number of orthopedic cases entitled their historical work record to more consideration than did that of any other group. The employment history of those using crutches was excellent and reflected the good record attained by the arthritic since the two groups were identical insofar as the two cases using crutches were concerned.

Here again, however, the uniqueness of the individual imperils the validity of generalizations. It is difficult to imagine a profession in which the two hands play a more important role than in the profession of "witchcraft" or stage magic. And yet there is a one-handed magician in the Southwest who is such a polished master of the art of ledgerdemaine that fellow craftsmen sitting among his bemused audience are unable to fathom his superb artistry of the mechanics of the "occult." Another incredible example is the armless protagonist of the disabled who shoots a very creditable game of golf and who once defeated a fine golfer in an exhibition. He is also a passable typist who can do 35 words a minute.

The perhaps unavoidable sheltering of the impaired and a laudable desire on the part of parents and others interested to compensate for the impairment through conferring additional educational advantages upon

the disabled was implied by a review of the educational attainments of the sample. The importance of providing an opportunity for the development of initiative and independence by the disabled in childhood was shown by the past record of lack of applications for employment by several members of the group of congenitally impaired.

In view of the above discussion of the potentialities of the handicapped, it is not surprising that so few placements had been made prior to the establishment of the Greeley office.

Remedial measures employed to correct above situation

For clientele who have just been referred to the agency the initial step is to determine eligibility and feasibility. The mentally subnormal boy or girl may be eligible for service, but unless proper supervisory care can be insured in his or her training and employment the rehabilitation attempt may end disasterously. One may be eligible in every way, but may be unacceptable to employers irrespective of his ability. Certain concerns refuse to hire anyone over a certain maximum age and under a certain minimum age. Others have been known in the past to reject married women and, in times of distress for labor, have even rejected single men. Still others draw the color line or refuse to hire certain nationalities. For the client who plans to begin vocational training in certain endeavors for placement in

specified communities these matters must be investigated prior to initiation of training.

Family considerations and financial factors also come into the scene. Where employment or training involves the transfer of a married man or a claimant physically dependent upon others arrangements for the change in location must be made in advance of the actual move to forestall difficulties which are likely to arise. If satisfactory arrangements cannot be made then the suggestion of an alternative plan is in order. If neither of these possibilities are acceptable to the client a period of deliberation is indicated for the claimant so that he may crystallize his thoughts and return for some other type of service.

For example, the girl with the "locked knee" may refuse to undergo an operation to stiffen and straighten her debilitated limb. In that event she will have to use crutches to get around which occupy her hands and consequently restrict their vocational use. The occupational choices open to her are correspondingly limited unless she has some special skill. However, if she later changes her mind and submits to a successful operation she is much less vocationally handicapped since she experiences a broadening of vocational opportunities.

Physical restoration measures.--The far-reaching vocational implications of physical restoration measures were rather plainly manifest in Case Number One to whom

attention was drawn in the last chapter. Ordinarily one would not conceivably associate the purchase of dentures with an occupational goal for the arthritic. However, the interplay is evocative of unforeseen developments for which provisions absolutely must be made. The nature of the occupation in which the claimant is engaged, or expects to become engaged, may call for unexpected measures with insistent and compulsive force.

Where the vocation necessitates one meeting the public and where elocution and enunciation of especial clarity are essential in the conduct of occupational endeavor, artificial teeth may need to be provided as a fundamental tool in earning a living. Salesmen, teachers, and lawyers exemplify the type of employees who may be, when indigent, eligible for this type of physical restoration. It must be remembered that physical restoration is one of those services for which eligibility is contingent upon proof of financial need. While the legal definition of financial need is not, fortunately, the sole criterion upon which services from the Vocational Rehabilitation Division of the Colorado State Board for Vocational Education are predicated, it is nevertheless one of the "screens" through which claimants must pass to reach the threshold of eligibility. Here as elsewhere, however, judicious decisions must be made so that no injustice may be rendered, and such decisions can only be made where the entire panorama of

the claimant and his vocational environment--past, present and discernable future, can be visualized in the eye of the mind of the counselor. To compel a claimant to dispose of a piece of equipment which he must have to earn his livelihood in the world of tomorrow merely to reach "pauperhood" does not appeal to the counselor as being good rehabilitational practice, since the identical equipment might have to be subsequently provided by the agency to consummate the rehabilitation of the client.

When prudence and wisdom are exercised in the provision of hearing aids, they are among the soundest of all physical restoration investments. Misdirected or undirected emotions, however, can easily lead to disappointment and heartache for the claimant. An acoustical loss of 60 per cent, and in some cases more, may be partially redeemed in a most successful manner if certain precautions are followed. One of the most essential questions to be asked is: "Will the client wear the instrument once it is purchased?" If the answer is uncertain, hesitation in procedure is clearly indicated. It is obviously futile to buy something which will be placed on a shelf in an attic to gather dust and rust, a tangible evidence of an exalted resolution which has been forgotten.

Another factor to be investigated is the ability of the client to read lips and his acoustical intelligence. Where hearing loss is greater than 70 per

cent, these two items become starkly significant. Despite the continual improvements in electronic instruments a certain amount of distortion accompanies the magnification of sound and contributes to its unintelligibility. Without either the visual assistance accorded by lip reading or by the help offered by the recollection of bygone sounds which the claimant once knew prior to the onset of his disability, this distortion of magnification becomes an exceedingly grave matter.

The understandable fears of those whose hearing has been gradually but inexorably leaving them of further injury and impairment to the faculty are groundless, but they must be convinced of this actuality or trouble is certain to ensue. The fact that acoustical intelligence may expand and grow through the opportunity offered for its exercise afforded by the use of a suitable instrument can never be made too plain to the claimant.

Although allusion was made to the necessity for the counselor to keep abreast of modern developments in electronics its recall to attention at this point is considered most apropos. The advancement in acoustical selectivity of fine instruments may insure their adoption by clients whose loss in hearing would have been beyond their compensatory acoustical power a few years ago.

The type of vocation in which one wishes to

enter is still another consideration which cannot be ignored, although it is difficult to conceive life without intelligible speech. Even so, there are perhaps jobs such as drafting where oral communication is not so profoundly a part of occupational endeavor. In these instances, the economic and vocational feasibility of an instrument might be justly questioned. It is well to pause at this point and reiterate the goal of the agency and the core of this study. It is suitable placement in an occupation compatible with the impairment of the claimant. For example, the pathos of being unable to appreciate a glorious symphony is very real, but it is not within the province of the serving agency. While it is sympathetically recognized that life itself comprises a great deal more than its narrow segment confined to vocational endeavor, the ever enlarging scope of occupational rehabilitation has, nonetheless, at the present writing failed to legally embrace the entire activity of the client.

No one realizes perhaps more poignantly than does the counselor, the often insuperable barrier placed in the path of success by noticeable loss of hearing when not corrected or when irremedial and no one probably receives more satisfaction, other than the interested claimant, in witnessing the practicable functioning of a fine instrument. The happy experience of a very dear friend in achieving, late in life it is

true, but nevertheless of finally achieving adequate compensation for his impaired faculty is one which justifies the description previously presented in this chapter.

Without a deep appreciation of these factual data, and without relevant advice from a competent and qualified otologist recommendations for an appliance are not made. The question of bone conduction and results of audiometric tests are only a few of the things to be considered. In the final analysis of this particular problem the value of a properly fitted and properly selected instrument can never be over-emphasized.

The prosthesis for lost extremities has long been a hallmark of rehabilitation, and artificial replacement of the lower extremities has been particularly successful. Certain precautions need be taken here, also, and the weight of the individual is one of these. When a below-the-knee amputation is contemplated the heavy pressure engendered by a weighty claimant upon a small bearing area poses a definite problem. If it is to be thus, sedentary position is certainly desirable and prolonged standing is to be avoided at all costs. The client with a slight physique has a more favorable vocational prognosis. The pressure per unit of bearing area on the stump is much less. The success of amputation is another factor in all prosthesis of this type. Proper shrinkage to the desired conical shape

prescribed for above-the-knee amputations is vital for comfort and utility. Bilateral amputations of the lower extremities present immensities of difficulty to the limb maker and limb fitter.

Prosthesis for the missing arm has not achieved an enviable record. To the uninitiated the hanging weight of such an appliance is not noticeable but to the claimant whose loss may have occurred in the remote past, the pressure on atrophied muscles and pain and discomfort entailed by the suspended weight they support can not be indefinitely prolonged. A recent amputation near the shoulder contains more promise, however. Here the muscles are found in their fully developed vigor and they consequently protect the tender and sensitive underlying nerves. For this type of amputation, prosthesis for appearance sake is the primary purpose.

For each of the above cases the future holds a bright promise. Prosthetic advances, spurred apace by the recent war, are creating amazingly natural replacements. A new cosmetic hand, the indistinguishable replica of the original, insofar as appearance is concerned, has been developed. Lighter and structurally stronger materials are being used in the construction of artificial limbs. The genesis of the "hydraulic" leg is on the vocational horizon. With this ultra-modern prosthesis are sustaining a bilateral above-the-knee

amputation might conceivably climb stairs without help.

Spatial limitations preclude the consideration of many other relevant measures of physical restoration which may be applied and in the future will be more successfully applied since they are beyond the scope of this study.

The "buttonhole" technique devised by the great Dr. Kessler to whom several references were made in the review of literature is, however, worthy of brief comment. As a layman, the counselor is unable to describe in physiological detail the precise procedure of the operation but the idea behind this restorative measure is to utilize the residual functional power of that part of the limb which has not been amputated.

For instance, in some cases a below-the-elbow amputation of the arm may permit the "coupling" of the muscles with prosthesis. Through the insertion of a "buttonhole" in the nether extremities of the natural tissue and through attachment of this "buttonhole" to the artificial hand voluntary muscular control over the hand is attained in a large measure. The wonderful Dr. Kessler has, as it were, endowed this mechanical prototype of the original member with life.

Vocational training.--Where the disability could not be removed by surgery or compensated by prosthesis and where placement in a suitable occupation compatible with the disability could not be obtained,

eligible clientele were often placed in vocational training where such training was feasible and desirable to the clients.

In some cases such as those of the arthritic who had secured the vocational training on his own initiative and at no cost to the agency employment tools were purchased for his use in the training period. Upon conclusion of the training period all tools furnished by the service may be used by the claimant in subsequent employment but title is retained by the rehabilitation agency. The tools remain the property of the organization to ensure their correct usage. So long as the claimant continues to utilize the tools furnished him to earn his living they will never be redeemed by the service but should he attempt to pawn or sell the tools he then initiates an illegal activity. This provision is merely a safeguard to implement the policies of the rehabilitation agency. It is the rankest of professional folly to buy tools for a claimant which he is not going to use to increase his economic productivity, or to maintain his present employment.

It is only under exceptional circumstances that correspondence work is deemed advisable. For certain academic courses of instruction it may have merit provided the claimant is one of those rare individuals who will take advantage of opportunities afforded by this kind of instruction. In other instances, also, it is

seriously considered. Where the client is bedfast it may be appropriate, provided it can be shown to have a valid and reliable vocational objective. It cannot be stressed too often that all activity carried on by the vocational rehabilitation agency must be directed toward vocational salvation of the individual concerned.

By Congressional mandate eligibility for all vocational training other than instructional costs is determined not only by the possession of a qualifying disability but also by proof of financial need. The use of cooperating agencies for evidence of financial need often saves a lot of time for the agent and is likely to produce more reliable results. Welfare organizations and loaning agencies usually make exhaustive investigations of their clientele, and, when such individuals are also qualified and feasible for vocational rehabilitation, the two agencies concerned dovetail their activities to their mutual advantage.

The determination of feasibility of the proposed training involves several points of interest. The vocational nature of the desired goal is always in the picture. Large numbers of people wish to send their children to college to broaden their cultural background. While this is a splendid ideal it is not necessarily preparation for a specific occupational objective. Others often wish to take a correspondence course in art or cartooning merely because they like to draw. The

training must be reasonably akin to preparation for a practicable trade or profession.

Where employment or institutional training is provided elsewhere than in the home community provisions for maintenance must often be made by the client or other interested parties. Failure to take this phase of the financial problem into consideration can easily lead to grief. Rising prices may outmode original provisions for maintenance made when the dollar would go far in the purchase of food and clothing.

The administration and evaluation of standardized tests for intelligence, aptitude, achievement and vocational interests precede the establishment of all training programs where questions of doubt arise. For college cases the results of such tests administered in high school are often accepted. However, the test of all is the "try-out." A preliminary trial in the training concern is of great value. Here, the claimant actually experiences the environmental factors to which he will be subject in the proposed training. He soon gets a pretty good idea of whether he can do the work by actually doing it. He also finds out whether he will like it and at the same time the concern discovers whether it likes the prospective trainee.

The cost of the training varies greatly from individual to individual depending upon a number of factors. The amount of previous training financed by

clientele or other interested parties is a factor influencing the picture and may also determine feasibility. With a limited budget not many individuals could be rehabilitated if each such client required $2000.00 or more for vocational training. The factor of clientele interest in the training, of course, is of superlative value. Where the client has invested his or her money into a training program he or she has greater motivation to excell in learning the subject matter, and also has an impelling desire to see the training through to completion.

Suitable placement in an occupation compatible with the disability is the controlling factor. Wages, alone, do not completely reflect the adequacy of training in meeting this criterion. The final employment may occasionally be less remunerative than that prior to rehabilitation but it will be in a position in which the rehabilitant can work indefinitely without imperilling his health.

Training in a business establishment is often preparation for entry into a vocation in the same plant or office following the completion of the course. In some instances a normal wage is provided while in training.

Employment found for various types of handicapped individuals

The economic effectiveness of vocational

rehabilitation is statistically measured by the quantity and quality of employed closures of its clientele. One is not considered rehabilitated prior to suitable placement in an occupation compatible with the individual disability. The number of placements is easily computed. It is merely a matter of tabulation. The question of suitability of the employment is not so easily answered. Here the individual ability and desires come into play. Family obligations and environmental factors such as satisfaction of the rehabilitant with his economic lot in life must be considered. Compatibility with the disability may change in the course of time in any given position.

The claimant with impaired legs illustrates the point. Some years ago he was rehabilitated as a tire and tube vulcanizer. At that time his youth and small stature enabled him to perform the duties of the job without discomfort. With advancing age, however, his "debilitated" legs gradually deteriorated until he finally had to abandon his job. He could not endure standing on concrete floors eight or 10 hours a day month after month. The orthopedic consultant was called in, and he suggested amputation of the less useful leg and its ensuing prosthesis to ameliorate the situation. His suggestions met the approval of the claimant and were consequently implemented to the mutual satisfaction of all parties concerned, and later employment was subse-

quently found.

Watch repair work has been a very successful and remunerative field for placement of the disabled. The high requirements for manual dexterity and eyesight plus mechanical intelligence and the long training period involved are factors to consider.

Although shoe repair work did not enter the scene insofar as the sample was concerned it is, nonetheless, one of the major fields in which disabled individuals have often found satisfying employment. Claimants with mild orthopedic infirmities of the lower extremities are particularly well adapted physically for engagement in this field.

The operation of elevators has few physical demands which cannot be met by large numbers of the disabled. However, the number of such jobs available in small rural areas which predominate in Northeastern Colorado are very few.

The physical demands of body and fender repair work dovetail very nicely with the physical capacities appraisal of many claimants in that many impairments do not interfere with accomplishment of the tasks at hand. Hearing is often unnecessary and clarity of enunciation may not be required and manual dexterity need not be possessed to an unusual degree.

The termination of officially recognized training and the initiational employment are often

indistinguishable insofar as the learning process of the vocation is concerned. This gradual transition is reflected in a number of relatively low starting salaries for the rehabilitated. In reality the learning period has not actually ended despite the initial receipt of wages by the claimant. Consequently the full value of the training has not been realized by the claimant in enrichment of vocational skill nor in material rewards from his employer.

Among the most difficult placements which the counselor has made have been those involving certain racial groups. Lack of formal educational attainments when coupled with enfeebled health may pose practicably insoluble problems. Three factors militate against vocational success for these groups. Sedentary positions in the clerical field are usually precluded because they require certain minimum education attainments. Heavy manual labor which may require little formal education may also have to be discarded for those with weakened physiques. Difficulties in understanding English also contribute to the problem. In some instances where one has sustained an infectious disease like tuberculosis, employers may refuse to hire despite proof of an arrested state. In other instances racial prejudice may bar the disabled group from employment.

In general the employment after rehabilitation had lower physical demands than the "Before" figures

where one was engaged in employment prior to rehabilitation--if any change in jobs was necessary. The influx of the disabled into the "white-collar" professions may always continue for this reason.

Although entry into drafting as a profession was not realized by any of the individuals in the sample, it has possibilities for many in that speech and hearing are of little occupational consequence. Local opportunities in this particular profession are largely confined to certain governmental agencies.

The variety of the nature of the placements made is a revelation of the many types of occupations into which the impaired can enter and should be a source of inspiration to those unemployed disabled as evincing proof of vocational opportunities locally available in many instances.

Methods used in following training program and placement of clients

Individual efforts by the clientele concerned will always be encouraged by the counselor since he feels it to be an excellent way to encourage the development of independence and self-reliance among the impaired. If the experiences the impaired meet in their quest for employment are challenging but not disheartening, they may nip the development of sycophancy in the bud.

However, the agent cannot evade responsibility for placement. It is his particular duty to see that it

is actually carried out. Where no other channels are available, personal contact with the employer in the presence of the client may be expedient.

It is only good judgment to use cooperating agencies in placement of clientele. An agency specializing in employment often has placement facilities unavailable to the counselor. College placement offices and training agencies themselves often have channels of information for employment opportunities and employer contacts which can effectively implement the placement policies of the rehabilitation agency.

Methods used in the vocational training of claimants are largely delegated functions. Lack of personnel and plant facilities prevent the actual rendering of instructional services by the antecedent agency. Correspondence courses are not ordinarily countenanced by the counselor. Extenuating circumstances --the saving grace--may alter the particular situation contemplated, however. Where one is bedfast and the training is a vocational significance, extension courses may be feasible. Or when theoretical courses are taken in conjunction with trade-school work, they may be advisable. Courses of academic content to supplement college instruction can also be worthwhile.

The necessity for vocational aptitude and interest testing prior to initiation of training was previously discussed, but the value of the "try-out"

period as an appropriate aid in prognosis of the contemplated training is worth recalling. The age-old idea that the way to decide whether one can do a thing and whether one likes to do a thing is to try doing it is always apropos.

Homebound teaching has not been extensively adapted throughout the area simply because qualified teachers of relevant subjects are hard to locate. Lip-reading, for example, which is definitely vocational training for the deaf, can be taught by only a select few individuals and is, of course, difficult to learn by anyone who has passed the plastic days of childhood.

Recommendations

The sweep of immensity of the field studied renders highly specific suggestions for individual localities, professions, training agencies and claimants of questionable value. The multiphasic aspect of the subject of this treatise is also a precluding factor to the formulation of dogmatic hypotheses. For this reason, the proposals herein advanced are promulgated only as general suggestions in order that extenuating circumstances may embrace the worthy client for whom no hard and fast rules can conceivably provide "for the deviate of deviates."

The impalpable nature of emotional associations which are inescapably associated with the human regard of one for another inevitably placed this study in the area

of "inexact sciences" with its many connotations of subjective opinion and, in all humility, the counselor presents his findings in the form of personal opinions honestly based upon the works of others and his own modest study for the suggestive guidance of others who may have a genuine and abiding interest in the affairs of the disabled.

Insofar as the vocationally handicapped of Northeastern Colorado are concerned the application of the Baruch plan, which was discussed in the review of literature, would have to be considerably modified in practice. The predominance of rural communities and small cities in the area would probably entail the adoption of a much less elaborate rehabilitation and service center. The extensive modifications, which would need to be devised for each of the localities concerned, involves so much study and research that it is beyond the scope of this treatise.

The only contemplated non-professional improvements in the situation which appeal to the counselor as worthy of consideration are the incorporation of more provisions to provide for the vocational training in public and private schools and for changes in lay attitudes toward the disabled to those of acceptance rather than those of toleration. The professional improvements recommended are mainly related to the application of the non-directive technique of the interview

and increased emphasis on vocational aspects of training.

The first of these plans involves the improvement in building plans for new schools. The elimination of many stairs is often feasible, and the construction of an occasional ramp in place of essential stairs, or the inclusion of an elevator in multi-storied buildings would be a real boon to the ambulatory client. It would also ease the transportation problem of those on crutches on their way from class to class.

Where a building is already in existence, prudent instructional planning may permit the relatively immobilized claimant to receive all the desired instruction on the ground floor of a multi-storied building.

The extension of a program for home-bound instruction which is now so successfully established in Larimer County to cover other sections of the studied area would certainly be beneficial in the rehabilitation of certain groups.

Itinerant vocational training for the disabled in remote sections might be contemplated with favor for certain areas in Northeastern Colorado. This suggestion includes provisions for speech teachers for claimants in isolated communities.

Public education.--As that grand practitioner of orthopedics and world renowned pioneer in the field of cineplastic surgery, Dr. Henry Kessler, once stated:

> All amputees are faced with a triple threat to their social and economic schemes of life: first of all by the physical defect itself which impairs their working capacity, by the psychological reaction to their disabilities, and, most of all, by the public prejudice which regards the amputee as a social leper and condemns him as unfit to take his place in society (39:1).

As one of the disabled, the counselor has come to personally know the crushing pressure exerted by certain segments of society as it regards the noticeably impaired. It is his profound conviction that education to dispel this mutually unfortunate attitude must begin with life itself, that is, practically from the cradle, and is in this sense an unattainable ideal but it can always be a star in the heavens to which humanity can continually aspire.

That the implementation of this extremely practical "code of ethics" will not be easy to approximate is prima facie evidence of its difficulty in functioning practice will never be denied by the counselor. Apropos of this observation, however, is the eminently practicable slogan of one of the state supervisors of vocational rehabilitation in these United States: "The man who says he can't, is always right because he never makes the attempt."

Workable suggestions include an elaborate program of adult education among parent-teacher associations since the discerning student of life realizes that the most effective teaching for the growing infant and

small child of pre-school age is that practiced by their parents. A supplementary and complementary regime of instruction to be concurrently incorporated in the education program of the primary grades would also be most advisable. This is a long-range proposal which may not reap immediately tangible rewards to the impaired particularly and to society generally, but its necessity and soundness can hardly be questioned.

A more specific suggestion of contemporaneous vocational moment is the immediate implementation of this ideal by a carefully formulated program of publicity through the following channels within the studied area:

1. Radio broadcasting from transmitters located in Greeley, Fort Collins, Boulder, and Sterling.

2. Newspaper publicity in the many county weeklies, school papers and city dailies.

3. Exhibition of intelligently directed films of educational and inspirational nature.

4. Programs of appropriate speeches to interested public groups.

5. Intensity of emphasis upon proper placement by the serving agency of rehabilitation in order that the employing public and the general population may be convinced by example of the contribution that the disabled have to offer for the common welfare.

A psychological verity to which one must cleave

in observing the practicable usage of the above agents for transmitting the preceding data desired is: When one wishes to inspire, the human voice is of surpassing value; and when transferral of factual thought is the goal, one can pour more through the eye with a medicine dropper than one can shovel into the ear with a scoop.

In this manner may eventually be brought into being a condition under which the process of entry into and ensuing progress in a profession by the disabled will not be such a trying experience as is so often the case today for those with noticeable impairments.

When and if this condition or set of circumstances ever evolves in society generally, the oddly changing set of values with which the occupational associates of the impaired often regard the obviously disabled may gradually recede into the savagery of the past. For instance, the tolerance of vocational superiors, which imperceptibly verges into what one might term the neutrality of non-belligerent hostility with professional advancement to occupational equality, and which may flare into hostility with further promotions up the vocational ladder to positions of superiority may, in some far distant day, not be especially visited upon the obviously disabled. The possibility that the impaired will not be singled out as recipients for this human occupational trait is obviously dependent upon the conviction by their fellow workers that the

"debilitated" are fellow humans of full stature. With this conviction the sting and taunt of working under one at whom the epithet "cripple" has all too often been flung in the past will not rankle so keenly.

Insofar as they, themselves, are concerned, this portion of the preceding quotation by Dr. Kessler is also apropos: "...by the psychological reaction to their disability..." which was rather fully presented in the review of literature. The bright promise held by the Rogerian concept of psychotherapy runs through this treatise like an old refrain, and its necessity is shown by many of the unemployed clientele at the time of survey. There work history was, in many instances, rather poor despite excellent educational backgrounds and the simplicity and effortless ease with which they were often placed indicates the necessity of heading off an only human tendency to despair in the face of misfortune-often the genesis of sycophancy.

The reversal of the above socially undesirable trend is the essence of the proposal so ably advanced by Carl Rogers and his protagonists and its benevolent cloak of embryonic possibilities to the development of an integrated personality justifies an increase in its widespread adoption by counselors of the disabled. This is particularly true of the area in which the local agent functions and its superlative value justifies its further developmental application in the geographical section of

the State. Its enlarged scope of application is proposed in the following section, but not to the entire exclusion of all other techniques of the interview.

Application of Rogerian concept (non-directive technique of the interview).--The counselor readily recognizes the immensities of practicable difficulties which beset one attempting to apply the non-directive ideal to the actual counseling of each of the hundreds of claimants who have just demands upon the time and services of the agent. This is not to deny that it works in practice--it does--but in difficult cases its psychotherapeutic properties require the passage of appreciable quantities of time to evolve a cure. In other cases of mild emotional imbalance, the claimant may soon find himself on the road to adult levels of mature adjustment with society and in the possession of the faculty of reaching wise and prudent decisions for his or her personal problems. Furthermore, there can be little fear of irreparable injury in its sometimes necessarily incomplete and fragmentary application to claimants with intricately complex and profoundly deep-seated personality maladjustments when properly directed. "You can't lose" if proper precautions are observed and "you are bound to gain", even if only a little, is always a good proposition, particularly in contradistinction to the grave dangers inherent in the indiscriminate and promiscuous proferring of advice.

The above is clearly understood when one critically appraises the definition of vocational guidance so concisely and pertinently formulated by Dr. George E. Myers.

> The standard definition of the term reads: "Vocational guidance is the process of assisting the individual to choose an occupation, prepare for it, enter upon, and progress in it." It is concerned not with doing things for the individual but with helping the individual do certain things for himself. (The italics are those of the writer). It is a process rather than merely a body of methods by which the process is carried on. (24:10).

Dr. Myers herein descriptively "senses" the guidance process or the hour of counsel, as a period during which the counselee reaches his own decisions and thereby increases in stature of emotional integration.

It may be advisable and perhaps necessary at this juncture to pause and reconsider the purpose which motivates Carl Rogers. It is unfortunately a commonplace opinion that the uninformed who initially regard the Rogerian concept consider it a "do nothing" school of guidance and counseling. The motivating purpose of the Rogerian disciples is partially evinced in their desire to clarify the nebulous thinking of many of the adherents of vague conceptions of what constitutes counseling, and and for the purpose of this study the following definition of effective counseling by Rogers should suffice:

> Effective counseling consists of a definitely structured, permissive relationship which allows the client to gain an

> understanding of himself to a degree which enables him to take positive steps in the light of his new orientation. This hypothesis has a natural corollary, that all the techniques used should aim toward developing this free and permissive relationship, this understanding of self in the counseling and other relationships, and this tendency toward positive self-initiated action (30:18).

Recommendations for further study

When additional appropriations are available:

1. To what extent will the tuberculous segment of the impaired benefit from the state-wide employment of a supervisor of tuberculosis by the Rehabilitation Service?

2. In what manner may a state-wide administrator of standardized vocational tests function most efficiently should he be engaged by the antecedent agency?

3. Is an expeditious subdivision of existing sectional State areas of rehabilitational endeavor justified, and if so, what proposals may be advanced?

4. What are the advantages of a state-wide study of occupations as a facilitating agent for suitable placement of the impaired?

5. What modifications in the application of the Baruch plan for a community rehabilitation and service center might prove feasible for the commu-

nities of which Northeastern Colorado is composed?

Chapter VI

SUMMARY

In order to secure factual information for the study of suitable employment opportunities and the manner in which proper placement could be facilitated for the disabled of Northeastern Colorado, a comparatively exhaustive review of the studies previously made of vocational rehabilitation was consummated. With these historical data as a frame for reference, the extant situation prior to the initiation of rehabilitation measures was critically evaluated in contradistinction to that which later came into being by virtue of the establishment of rehabilitation measures.

This necessarily subjective appraisal of the circumstances at the two different times in the history of the 14 counties concerned was founded on the most objective information available. These data were those contained within the files of the area office located in Greeley, Colorado, of the Vocational Rehabilitation Division of the Colorado State Board for Vocational Education.

In order to record uniformly this information and to insure the complete recording of all relevant facts for the complete vocational scene of every individual for

whom service is mutually desired by clientele and the representative of the antecedent agency, the concerned claimant had to be "processed" through a large assembly of forms.

With the rather comprehensive conception of the various factors which play a decisive role in the final decisions of eligibility and feasibility of clientele, as well as those concerned with the physical restoration measures, training programs and final placement which was made possible by the meticulous examinations of these forms, the situation prior to and subsequent to rehabilitation became more meaningful to the discerning student.

The 62 clientele placed in suitable employment in the area during the fiscal year 1947 could then be vocationally appraised for pertinency to the issues at hand. With the aforementioned attributes as a criterion, 22 of the 62 were precluded from the final sample.

The entire 62 and the final 40 selected for the sample were critically regarded from the occupational point of view as individually providing possible answers for the one major problem and four subordinate problems whose resolving would, it was felt, offer much promise in improving present employment opportunities. The major problem and the four subordinate problems were respectively:

1. Adequacy of employment opportunities as suitable placement facilities.

a. Types of impaired individuals referred to the local rehabilitation office in Greeley which serves the area.
b. Remedial measures employed to correct extant situation.
c. Employment found for the disabled.
d. Methods used in training programs and placements of clientele.

The answer to the major problem was dependent upon the solution of the four subordinate problems listed above, the first of which involved the types of disabled individuals referred to the local rehabilitation office in Greeley.

Prior to July 1, 1946, 57.4 per cent of the 54 referrals receipted were classified as orthopedic, in sharp contradistinction to the 48.2 per cent of the 345 referred claimants during the fiscal year, 1947. The number of clientele diagnosed as visually impaired increased from three to 14, but their percentage of the total number of referrals decreased from 5.5 to 4.9 per cent. Those reported to the agency with loss of hearing, however, increased both percentagewise and numerically.

The cardiac and tuberculous referrals also increased percentagewise in a slight measure during the fiscal year, 1947, as compared with those referred in previous years.

The miscellaneous classification of the

composite referral picture increased from 22.2 per cent to 25.5 per cent of the total reported cases during the fiscal year, 1947. This growing percentage was thought to be an inferential evidence that better methods of diagnosis were revealing the multi-phasic nature of impairments to which humanity is subject.

The total number referred to the agency during all the years prior to July 1, 1947, which was 399, constituted the statistical matrix from which the 62 rehabilitated claimants, or rehabilitants as they are often designated, were selected. This selection was largely an involuntary one insofar as the counselor was involved. Precluding factors which came into play were: lack of interest on the part of the referred individuals and ineligibility of the referred when the disability was not construed to be a vocational handicap by the various medical specialists concerned.

The remedial measures which were employed to correct or alleviate the circumstances at the time of the survey included prosthesis, vocational training in institutions and places of business, counseling and guidance, and the actual direct placement for only a few of those rehabilitated.

Five of the rehabilitated cases were provided, in some measure, a degree of physical restoration. Dentures, eye-glasses, artificial legs, repair and "boot" for the difference between the sum received on a trade-in

allowance and the purchase price of a new hearing aid, and a corrective corset or "brace" were proffered to and accepted by these clientele.

Fourteen of the 40 were given vocational training of various types, of which six had matriculated in colleges and universities, three in business colleges, one in a private trade school, while the remaining four were trained in business establishments.

Each of the 40 was counseled during the process of his application for assistance and in his "conveyance" through the assembly of forms required for the determination of eligibility. The actual placement process was, insofar as consistency with final suitable placement policy permitted, the individual responsibility of clientele. In this manner the development of vocational independence was fostered. In the few cases where individual effort failed, assistance in actual placement was rendered, but only as a last resort.

The actual type of employment found for these 40 individuals was extremely variegated. Only in the occupation designated as "farm-hand" or "ranch-hand" were there more than two or three individuals placed. The list of positions occupied by clientele at the closure of the survey was a long one, of which the following are only a few; commercial artist, truck driver, house painter, seamstress in alteration department of feminine apparel shop, lawyer, laborer in sugar beet factory, hostess in a

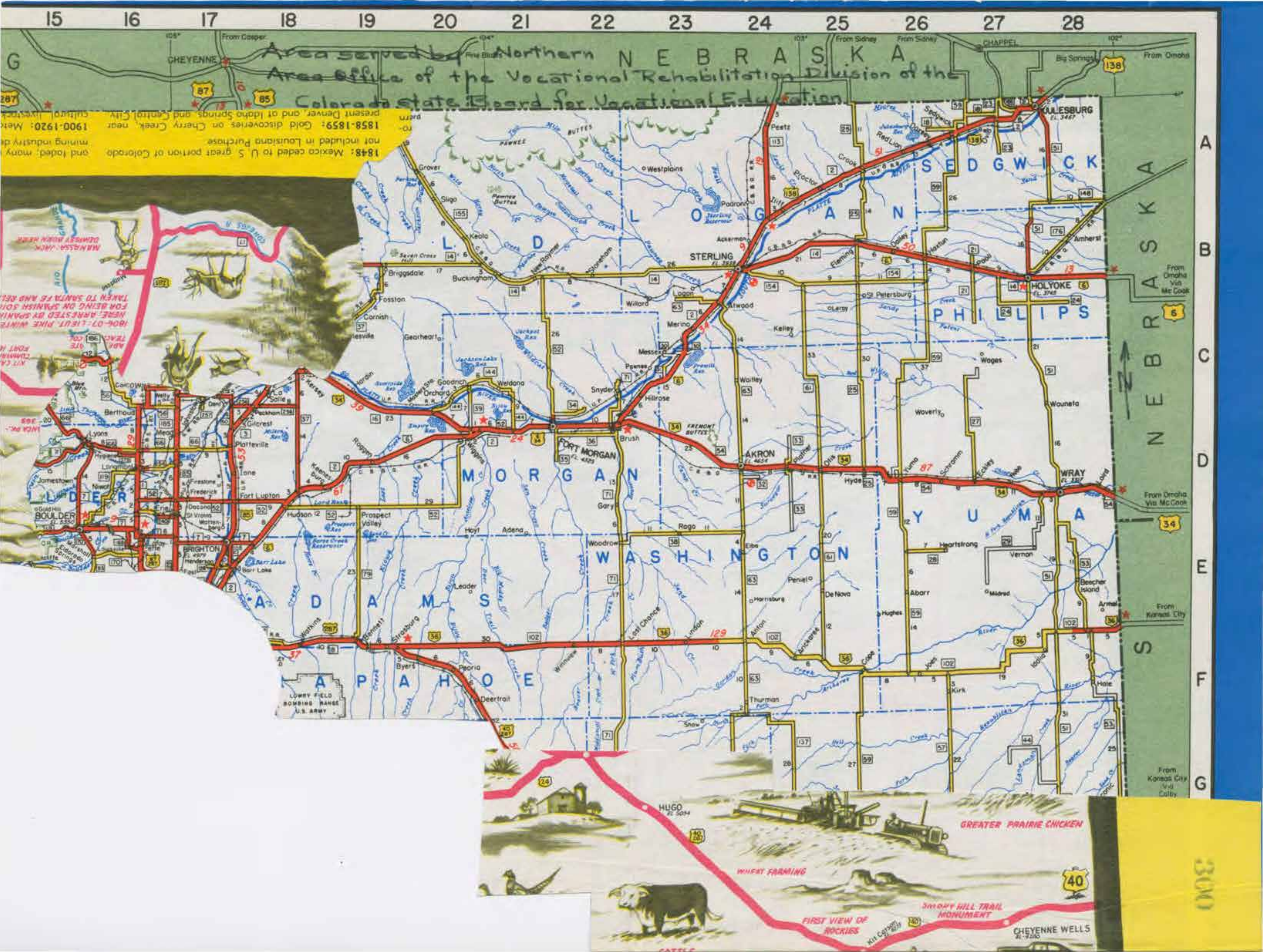
tea room, automobile mechanic, school teacher, and watch repairman.

The methods used in following the training program and placement of clientele were distinctly different in each of the two services rendered. In the first instance, the method was of necessity comprised of delegated functions. The lack of personnel and plant equipment of the local rehabilitation agency precluded its direct rendering of this educational service.

APPENDIX

APPENDIX TABLE OF CONTENTS

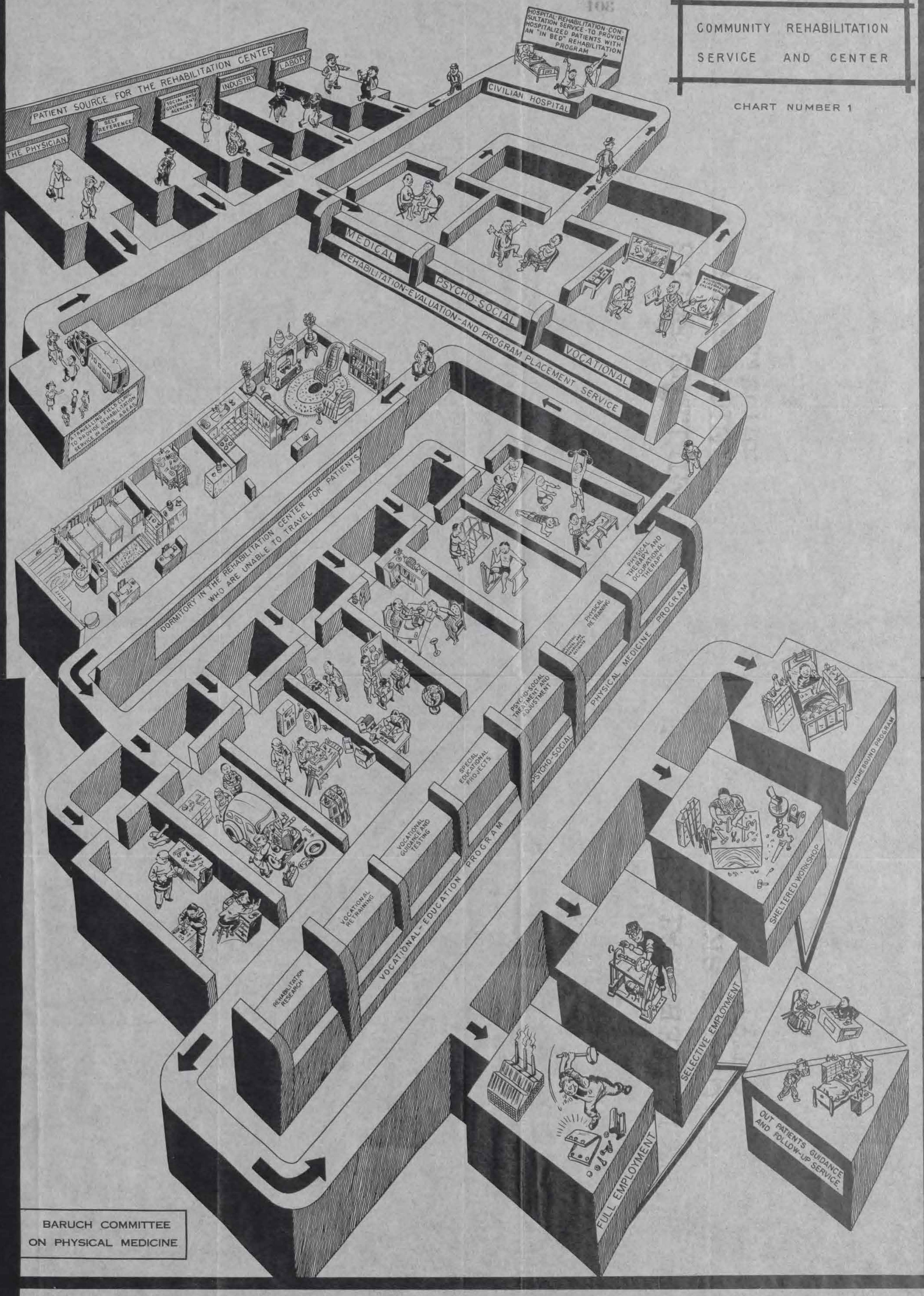
Appendix A.--MAP OF NORTHEASTERN COLORADO STUDIED FOR POSSIBILITIES OF IMPROVING OCCUPATIONAL OPPORTUNITIES FOR VOCATIONALLY HANDICAPPED CITIZENS AND SCHEMATIC PRESENTATION OF BARUCH PLAN FOR A COMMUNITY REHABILITATION SERVICE AND CENTER


Area served by Northern Area Office of the Vocational Rehabilitation Division of the Colorado State Board for Vocational Education
NEBRASKA
LOGAN
SEDGWICK
PHILLIPS
MORGAN
WASHINGTON
YUMA
ADAMS
ARAPAHOE
STERLING
FORT MORGAN
AKRON
WRAY
HOLYOKE
JULESBURG
BRUSH
BOULDER
BRIGHTON
HUGO
CHEYENNE WELLS
GREATER PRAIRIE CHICKEN
WHEAT FARMING
FIRST VIEW OF ROCKIES
SMOKY HILL TRAIL MONUMENT
1848: Mexico ceded to U. S. great portion of Colorado not included in Louisiana Purchase
1858-1859: Gold discoveries on Cherry Creek, near present Denver, and at Idaho Springs and Central City.
1900-1920: Metal mining industry de...
From Omaha
From Kansas City
300

Area served by Northern
Area Office of the Vocational Rehabilitation Division of the
Colorado State Board for Vocational Education

COMMUNITY REHABILITATION SERVICE AND CENTER

CHART NUMBER 1



BARUCH COMMITTEE
ON PHYSICAL MEDICINE

ORGANIZATION CHART
OF A
REHABILITATION CENTER

CHART NUMBER 2

BOARD OF GOVERNORS

Composed of capable, interested, influential leaders in the community who will set the policy and operating procedures of the Rehabilitation Center.

ADVISORY COMMITTEES

Representative committees of the: (a) medical profession; (b) industry; (c) labor; (d) social agencies; (e) civic organizations. These committees will act as special advisory groups to the Board of Governors and will advise on specific problems in their respective fields.

ADMINISTRATOR
(Medical or Lay)

Plans, directs, and supervises the activities of the Rehabilitation Center.

REHABILITATION CONSULTATION SERVICE

Provides consultation service to hospitals and physicians for the purpose of evaluation and prognosis of the patient's disability and the institution of an early rehabilitation program in the definitive stage of treatment, in cooperation with the physician and hospital physical medicine department.

MEDICAL CONSULTATION SERVICE

To be composed of consulting medical specialists to provide special medical consultation for patients in the rehabilitation center.

MEDICAL SERVICES DIVISION

MEDICAL DIRECTOR

1. Plans, directs, and supervises the medical activities of the Medical Service Division.
2. Maintains liaison with appropriate medical and social agencies.
3. Operates and supervises the Rehabilitation Consultation Service.
4. Plans, supervises and directs clinical investigation and research projects.

VOCATIONAL SERVICES DIVISION

VOCATIONAL DIRECTOR

1. Plans, directs, and supervises the activities of the vocational and educational service division.
2. Conducts vocational and psychologic testing research activities.
3. Operates and directs the vocational and educational activities of sheltered workshops, curative workshops, and the home-bound program.

PHYSICAL MEDICINE BRANCH
(Chief to be a physician who is a specialist in the field of Physical Medicine and Rehabilitation)

1. Plans, directs, and supervises all projects in the field of physical medicine.
2. Plans and directs special investigations in the field of physical medicine.
3. Maintains liaison with the psycho-social, vocational, and educational services branch.
4. Maintains liaison with appropriate civilian and medical organizations relative to the professional problems pertinent to rehabilitation and physical medicine.

PSYCHO-SOCIAL BRANCH
(Chief to be a qualified psychiatrist)

1. Plans, directs, and supervises the activities of the Psycho-Social Branch.
2. Initiates and supervises special research projects in the psycho-social field.
3. Maintains liaison with appropriate medical and civilian agencies.

OCCUPATIONAL THERAPY SECTION
(Chief to be a qualified occupational therapist)

1. Plans, directs, and supervises the occupational therapy program for the physical medicine branch.
2. Maintains close liaison with the Chief, PT and PE sections.

PHYSICAL THERAPY SECTION
(Chief to be a qualified physical therapist)

1. Plans, directs, and supervises the program of physical therapy.
2. Maintains close liaison with the Chief, OT and PE sections.

PHYSICAL EDUCATION SECTION
(Chief to be a qualified specialist in physical education, corrective exercises and physical retraining)

1. Plans, directs, and supervises the program of physical reconditioning, physical retraining, and re-education.
2. Maintains close liaison with the Chief, OT and PT sections.

CLINICAL PSYCHOLOGICAL SECTION
(Chief to be a qualified clinical psychologist)

1. Plans, directs, and supervises the activities of this section.
2. Maintains close liaison with the Social Service Section.

SOCIAL SERVICE SECTION
(Chief to be a qualified social worker)

1. Plans, supervises, and directs the program of this section.
2. Maintains close liaison with appropriate medical and civilian agencies.

VOCATIONAL GUIDANCE AND TESTING BRANCH
(Chief to be a qualified specialist in vocational guidance)

1. Plans, supervises and directs the activities of this branch.
2. Operates a program of psychological testing, vocational education, and retraining.
3. Conducts special investigative procedures in the field of vocational guidance and testing as it relates to physical and mental disabilities.
4. Maintains close liaison with the physical medicine and psycho-social branches.

SPECIAL EDUCATION BRANCH
(Chief to be a qualified educator)

1. Plans, directs, supervises the activities of this branch, including special education projects for the physically and mentally handicapped.
2. Maintains close liaison with the Vocational Guidance and Testing Branch

SHELTERED WORKSHOP

A workshop for the severely physically and mentally handicapped who are not capable of employment through usual industrial channels.

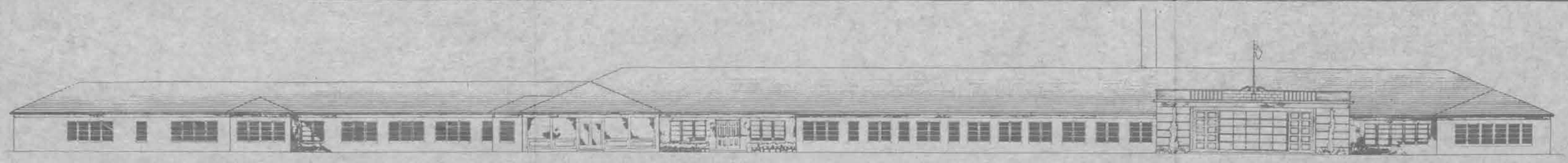
CURATIVE WORKSHOP

A workshop, the purpose of which is to coordinate physical and psychological disabilities with vocational opportunities and provide retraining in this specialized field.

HOME-BOUND PROGRAM

This will provide for the individuals who are not ambulatory and must carry on industrial projects within the confines of their own homes.

BARUCH COMMITTEE ON PHYSICAL MEDICINE



COLONIAL ELEVATION

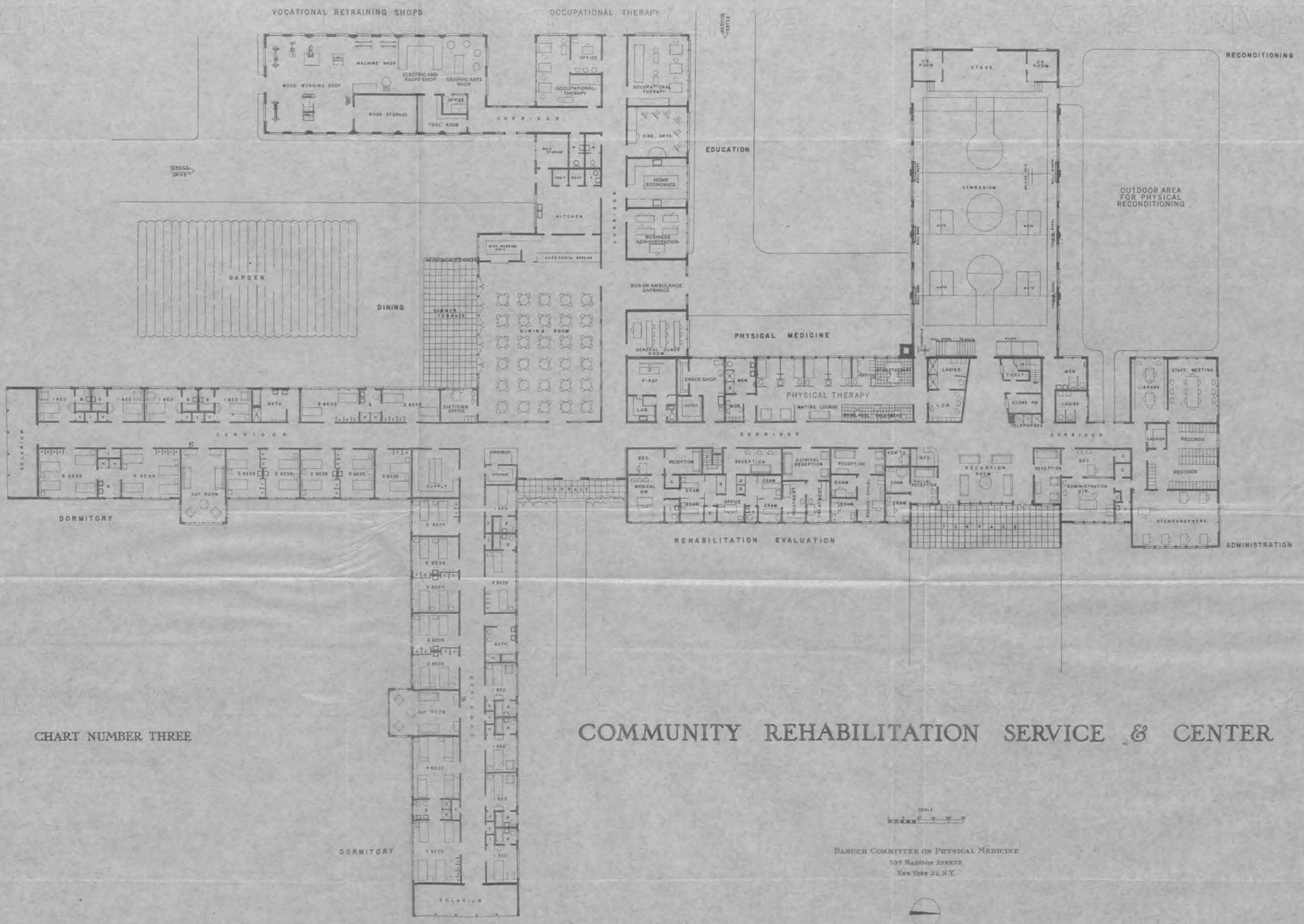


CHART NUMBER THREE

COMMUNITY REHABILITATION SERVICE & CENTER

BARUCH COMMITTEE ON PHYSICAL MEDICINE
507 MADISON AVENUE
NEW YORK 22, N.Y.

MODERN ELEVATION

Appendix B.--ASSEMBLY OF FORMS USED BY VOCATIONAL REHABILITATION DIVISION OF THE COLORADO STATE BOARD FOR VOCATIONAL EDUCATION

COUNTIES SERVICED BY EACH AREA OFFICE

DENVER AREA
Parnell McLaughlin, Supervisor
Room 6 - Opportunity School
13th & Welton, Denver 4, Colorado

Adams
Aurora
Arapahoe
Englewood
Littleton
Clear Creek
Denver
Gilpin
Jefferson

NORTHERN AREA
Joseph V. Morton, Supervisor
403 Greeley Building
Greeley, Colorado

Adams
Arapahoe
Boulder
Cheyenne
Jackson
Kit Carson
Larimer
Lincoln
Logan
Morgan
Phillips
Washington
Weld
Yuma
Sedgwick

SOUTHERN AREA
Edw. L. Reichert, Supervisor
324 Central Block
Pueblo, Colorado

Alamosa
Baca
Bent
Conejos
Costilla
Crowley
Custer
Douglas
Elbert
El Paso
Fremont
Huerfano
Kiowa
Las Animas
Mineral
Otero
Park
Prowers
Pueblo
Rio Grande
Saguache
Teller

WESTERN AREA
Wm. E. Ratekin, Supervisor
505 1st Nat'l. Bank Bldg.
Grand Junction, Colorado

Archuleta
Chaffee
Delta
Dolores
Eagle
Garfield
Grand
Gunnison
Hindsdale
Lake
La Plata
Mesa
Moffat
Montezuma
Montrose
Ouray
Pitkin
Rio Blanco
Routt
San Juan
San Miguel
Summit

COLORADO VR-20
DIVISION OF VOCATIONAL REHABILITATION
CASE REFERRAL

Date _____

From: _____

_____
(Address)

To: Division of Vocational Rehabilitation
State Board for Vocational Education
(SEE OTHER SIDE FOR OFFICE ADDRESS)

We give below a brief description of a handicapped individual who is interested in the services you offer, and may be eligible for assistance:

Name _____

Address _____ Age _____

Disability _____ Single ____ Married ____

Occupation (if any) _____

Present Employment _____

Remarks _____

_____

By _____

COUNTIES SERVICED BY EACH AREA OFFICE

DENVER AREA
Parnell McLaughlin, Supervisor
Room 6 - Opportunity School
13th & Welton, Denver 4, Colorado

Adams
Aurora
Arapahoe
Englewood
Littleton
Clear Creek
Denver
Gilpin
Jefferson

NORTHERN AREA
Joseph V. Morton, Supervisor
403 Greeley Building
Greeley, Colorado

Adams
Arapahoe
Boulder
Cheyenne
Jackson
Kit Carson
Larimer
Lincoln
Logan
Morgan
Phillips
Washington
Weld
Yuma
Sedgwick

SOUTHERN AREA
Edw. L. Reichert, Supervisor
324 Central Block
Pueblo, Colorado

Alamosa
Baca
Bent
Conejos
Costilla
Crowley
Custer
Douglas
Elbert
El Paso
Fremont
Huerfano
Kiowa
Las Animas
Mineral
Otero
Park
Prowers
Pueblo
Rio Grande
Saguache
Teller

WESTERN AREA
Wm. E. Ratekin, Supervisor
505 1st Nat'l. Bank Bldg.
Grand Junction, Colorado

Archuleta
Chaffee
Delta
Dolores
Eagle
Garfield
Grand
Gunnison
Hindsdale
Lake
La Plata
Mesa
Moffat
Montezuma
Montrose
Ouray
Pitkin
Rio Blanco
Routt
San Juan
San Miguel
Summit

COLORADO VR-20
DIVISION OF VOCATIONAL REHABILITATION
CASE REFERRAL

Date _____

From: _____
(Address)

To: Division of Vocational Rehabilitation
State Board for Vocational Education
(SEE OTHER SIDE FOR OFFICE ADDRESS)

We give below a brief description of a handicapped individual who is interested in the services you offer, and may be eligible for assistance:

Name _____

Address _____ Age _____

Disability _____ Single ____ Married ____

Occupation (if any) _____

Present Employment _____

Remarks _____

_____

By _____

COUNTIES SERVICED BY EACH AREA OFFICE

DENVER AREA
Parnell McLaughlin, Supervisor
William C. Weidner, Supervisor
Room 6 - Opportunity School
13th & Welton, Denver 4, Colorado

Adams
Aurora
Arapahoe
Englewood
Littleton
Clear Creek
Denver
Gilpin
Jefferson

NORTHERN AREA
Joseph V. Morton, Supervisor
403 Greeley Building
Greeley, Colorado

Adams
Arapahoe
Boulder
Cheyenne
Jackson
Kit Carson
Larimer
Lincoln
Logan
Morgan
Phillips
Sedgwick
Washington
Weld
Yuma

SOUTHERN AREA
Edw. L. Reichert, Supervisor
324 Central Block
Pueblo, Colorado

Alamosa
Baca
Bent
Conejos
Costilla
Crowley
Custer
Douglas
Elbert
El Paso
Fremont
Huerfano
Kiowa
Las Animas
Mineral
Otero
Park
Prowers
Pueblo
Rio Grande
Saguache
Teller

WESTERN AREA
Wm. E. Ratekin, Supervisor
505 1st Nat'l. Bank Bldg.
Grand Junction, Colorado

Archuleta
Chaffee
Delta
Dolores
Eagle
Garfield
Grand
Gunnison
Hinsdale
Lake
La Plata
Mesa
Moffat
Montezuma
Montrose
Ouray
Pitkin
Rio Blanco
Routt
San Juan
San Miguel
Summitt

VR-21

COLORADO
DIVISION OF VOCATIONAL REHABILITATION
ADVICE OF ACTION TAKEN

Date_____

From: Division of Vocational Rehabilitation, office at_____
State Board for Vocational Education

To:_____ Address_____

Subject: Action taken in case of_____ Address_____

You are advised that the case of the above-named disabled individual whom you referred for vocational rehabilitation is at this time in the status indicated below:

1. Action deferred because_____
2. Being considered for immediate service_____
3. Plan of rehabilitation determined, will begin_____
4. In process of rehabilitation, service began_____
   Plan includes: Medical treatment_____ Appliance_____ Training_____ Placement_____
5. Closed, reason_____ Date_____

Services rendered:

None - - - - - - - - - - - - - - - - - _____
Medical or other therapy - - - - - - - _____
Artificial Appliance - - - - - - - - - _____
Training - - - - - - - - - - - - - - - - _____
Placement in employment (only) - - - - _____
Services described - - - - - - - - - - _____

_____ (Signature)

_____ (Title)

COUNTIES SERVICED BY EACH AREA OFFICE

DENVER AREA
Parnell McLaughlin, Supervisor
William C. Weidner, Supervisor
Room 6 - Opportunity School
13th & Welton, Denver 4, Colorado

Adams
  Aurora
Arapahoe
  Englewood
  Littleton
Clear Creek
Denver
Gilpin
Jefferson

NORTHERN AREA
Joseph V. Morton, Supervisor
403 Greeley Building
Greeley, Colorado

Adams
Arapahoe
Boulder
Cheyenne
Jackson
Kit Carson
Larimer
Lincoln
Logan
Morgan
Phillips
Sedgwick
Washington
Weld
Yuma

SOUTHERN AREA

Edw.L.Reichert, Supervisor
324 Central Block
Pueblo, Colorado

Alamosa
Baca
Bent
Conejos
Costilla
Crowley
Custer
Douglas
Elbert
El Paso
Fremont
Huerfano
Kiowa
Las Animas
Mineral
Otero
Park
Prowers
Pueblo
Rio Grande
Saguache
Teller

WESTERN AREA

Wm. E. Ratekin, Supervisor
505 1st Nat'l.Bank Bldg.
Grand Junction, Colorado

Archuleta
Chaffee
Delta
Dolores
Eagle
Garfield
Grand
Gunnison
Hinsdale
Lake
La Plata
Mesa
Moffat
Montezuma
Montrose
Ouray
Pitkin
Rio Blanco
Routt
San Juan
San Miguel
Summitt

COLORADO
DIVISION OF VOCATIONAL REHABILITATION
ADVICE OF ACTION TAKEN

VR-21

Date_____

From: Division of Vocational Rehabilitation, office at_____
State Board for Vocational Education

To:_____ Address_____

Subject: Action taken in case of_____ Address_____

You are advised that the case of the above-named disabled individual whom you referred for vocational rehabilitation is at this time in the status indicated below:

1. Action deferred because_____
2. Being considered for immediate service_____
3. Plan of rehabilitation determined, will begin_____
4. In process of rehabilitation, service began_____
   Plan includes: Medical treatment_____ Appliance_____ Training_____ Placement_____
5. Closed, reason_____ Date_____
   Services rendered:
   None - - - - - - - - - - - - - - - - - - _____
   Medical or other therapy - - - - - - - - _____
   Artificial Appliance - - - - - - - - - - _____
   Training - - - - - - - - - - - - - - - - _____
   Placement in employment (only) - - - - _____
   Services described - - - - - - - - - - - _____

_____
(Signature)

_____
(Title)

Form R-2
Colorado

VOCATIONAL REHABILITATION DIVISION
STATE BOARD FOR VOCATIONAL EDUCATION

APPLICATION OR REFERRAL FOR VOCATIONAL REHABILITATION

Name_____ Street or R.F.D._____

Post Office_____ County_____ Phone_____

If in country, direction from Post Office_____ Distance_____

Nearest Highway No._____ Distance from Highway_____ Direction_____

Sex_____ Date of birth_____ Race_____ Marital Status_____

Dependents: No. wholly_____ partly_____; Education - Grade_____

Resident of this State?_____ How long?_____ Citizen of U.S.?_____ How long?_____

Disability_____

Cause of disability_____

Hospital or doctor by whom treated_____

Present health_____ Is medical treatment or appliance needed?_____

Present job_____ Employer_____ Wage $_____ wk.

Is this job satisfactory?_____ If not, why?_____

Other jobs held:	Employer:	Years:	Wage:	Reason for leaving:
1._____	_____	19__ to 19__	$_____ wk.	_____
2._____	_____	19__ to 19__	$_____ wk.	_____
3._____	_____	19__ to 19__	$_____ wk.	_____

If not qualified for a job, choice of occupation: 1st_____

2nd_____ 3rd_____

Date_____ Signature_____

308

STATE OF COLORADO
VOCATIONAL REHABILITATION

R-1

Case No. _____ Name _____
Address _____ County _____
_____ Phone _____
Dr., Hosp. or clinic _____
Referred by _____ Date _____
Check: ☐ Civilian ☐ Merchant Seaman
☐ U. S. Civil Employee ☐ Veteran (War II)
Age _____ Sex _____ Race _____ Mar. Stat. _____
Dependents _____ Education _____
Check: ☐ Self-supporting ☐ Part. self-supporting ☐ Dependent
Source of support _____
Wkly. amt. $ _____ Emplt. history _____
Orig. disab. _____
Diagnosis (med.) _____
Involvement _____
Age (at disablement) _____ Occup. Obj. _____
Trg. course _____
Mos. _____ Trg. agency _____
Other trg. _____ Mos. ____

Case-load data		19___				19___				19___			
	Tally Line No:												
	Quarter:	1	2	3	4	1	2	3	4	1	2	3	4
	Status Number:												

	Date: Year																						
	Month																						
	Day																						
Contact with:	Client																						
	Family																						
	Other																						
Status after contact:																							
Client performance:	Attendance																						
	Progress																						
	Quality of work																						
	Cooperation																						
	Difficulties																						
	Needs																						
Agt.	Report due																						
	Report made																						

CLOSED
☐ From referred status. Reason _____
☐ 12. Employed, Job _____
Employer _____ Wage (wkly.) _____
☐ 13. Unemployed ☐ 14. Trsf. other agency ☐ 15. Other reasons
Reason _____ Date _____

FIELD NOTES

(Read instructions for ATP-3)

FIELD NOTES

(11-52911-5,000)

SERVICES

(√) Provided (X) Purchased (0) Without cost

		Year / Month / Day
Diagn. and couns.	Investigation	
	Refer. other agcy.	
	Guid. and planning	
	Comp. adj.	
	Psycho. tests	
	Med. exam.	
	Psychiatric exam.	
Medical services	Medical treatment	
	Psychiatric treatment	
	Surgical treatment	
	Dental treatment	
	Other treatment	
	Hospitalization	
	Conv. home care	
	Physio-therapy	
	Occupational therapy	
	Work therapy	
	Home nurse care	
	Other	
Appliances	Dental	
	Artificial limb(s)	
	Brace(s)	
	Hearing aid	
	Glasses-artificial eyes	
	Surgical	
	Other	
	Repair of appl.	
Training	Educ. institution	
	Employment	
	Corres.-ext.	
	Tutorial	
Miscellaneous	Trg. sup.-mat.	
	Transp., diagn.	
	Transp., med. treat.	
	Transp., trg.	
	Transp., placement	
	Maint., med. treat.	
	Maint., trg.	
	Occup. tools-equip.	
	Occup. licenses-fees	
Plmt.	Direct	
	Indirect	

STATE OF COLORADO
REHABILITATION DIVISION

VR-1

Reopened ___ New ___

SURVEY

Case No. _____

Date _____

Area _____

Name _____

Address _____

County _____ Tel.No. _____

Referred by _____ Code _____

CLASSIFICATION

Male ___ Female ___

Civilian ..... ___
Merchant Seaman ..... ___
U. S. Civil Employee ..... ___
Civilian Defense Service ... ___
Veteran World War II ..... ___

White ... ___
Negro ... ___
Other ... ___

Nationality of Origin _____

HOME-FAMILY

Father's or mother's name and address:

_____

Marital Status:

Single ..... ___ Divorced .... ___
Married ..... ___ Separated ... ___
Widowed ..... ___

Family Members:

Father ..... ___ Husband ..... ___
Mother ..... ___ Wife ..... ___

Brothers (No.) ___ Ages _____
Sisters (No.) ___ Ages _____
Children (No.) ___ Ages _____

Dependents:

Mother ..... ___ Husband ..... ___
Father ..... ___ Other ..... ___
Wife ..... ___
Children (No.) ___ Ages _____

PHYSICAL FACTORS

Age ___ Weight _____ Height _____

Place of Birth _____

Date of Birth _____

Citizen ..... Yes ___ No. ___

Years in Colorado ..... ___

Physical Disability (describe)

_____

_____

Age when disabled ..... ___

Extent of disability _____

_____

Origin of disability:

Employ. Acci. (Compensable) ..... ___
Employ. Acci. (Non-Compensable) ... ___
Other Accident ..... ___
Disease ..... ___
Congenital ..... ___
Military or Naval ..... ___
War Action-Civilian ..... ___
Employ. Acci. (Federal) ..... ___

Other Defects:

Vision ... ___ Heart ... ___ Hernia ___
Hearing .. ___ Lungs ... ___ Asthma ___
Epilepsy.. ___ Teeth ... ___ Other. ___

General Health:

Good ... ___ Frequently sick ..... ___
Fair ... ___ Occasionally sick .... ___
Poor ... ___ Seldom sick ..... ___

Prosthetic Appliances:

Used _____ Needed _____
Condition:
Poor ___ Fair ___ Satis. ___ Good ___

Treatment for Disability:

Hospital _____

Address _____

Date _____

Last doctor _____

Address _____

Date _____

ECONOMIC FACTORS

Support:
Self ..... ___
Partially ..... ___
Dependent ..... ___

Source of Support:
Wage ..... ___
Savings or Income ..... ___
Family ..... ___
Unemployment Compensation ..... ___
Insurance ..... ___
Relief (Public) ..... ___
Relief (Private) ..... ___
Wkly. Amount Received $ _____

Home:
Owner ___ Value (Est.) ..$ _____
Buyer ___ Mortgage ..... $ _____
Renter ___ Rent Paid Mo.. $ _____
Roomer ___ Rent Paid Mo.. $ _____

Auto:
Make _____ Year _____

Other Property:
Describe _____

_____ Value $ _____

Compensation Information:
State Fund ___ Other ___

Disability Rating ..... _____
Award ..... $ _____
Weekly Amount ..... $ _____
Number of Weeks ..... _____
Lump sum settlement .... $ _____

Applied for ..... ___

Received ..... ___

EMPLOYMENT HISTORY

Never worked ..... ___
Substantial employment ..... ___
Part-time ..... ___

Jobs Held:

PRESENT _____

_____ Wk. Wage $ _____

Employer _____

Address _____

From _____ To _____

Reason quit _____

AFTER DISABLED _____

_____ Wk. Wage $ _____

Employer _____

Address _____

From _____ To _____

Reason quit _____

AT DISABLEMENT _____

_____ Wk. Wage $ _____

Employer _____

Address _____

From _____ To _____

Reason quit _____

BEFORE DISABLED _____

_____ Wk. Wage $ _____

Employer _____

Address _____

From _____ To _____

Reason quit _____

EDUCATIONAL FACTORS

Grade Completed: (Circle)

	0	1	2	3	4	5	6	7	8
High School				9	10	11	12		
College				13	14	15	16		

Graduate: Yes ___ No ___

Last school attended _____

Location _____

Last year in attendance_____ Age ____

Other Training:

Kind _____

Length of Time_____

Where taken _____

When _____

VOCATIONAL FACTORS

Vocational choice: 1st _____

2d _____

Reason:

Interest ...	___	Experience	___
Good Pay ...	___	Advised	___
Light work .	___	Job Oppor.....	___

Hobbies _____

Aptitudes:

None apparent	___	Commercial	___
Mechanical ..	___	Musical	___
Artistic	___	Social	___

With people ... ___
With things ... ___
With ideas .... ___

Preparation for Job:

None	___	Undertaken	___
Planned ...	___	Completed	___

Nature of preparation _____

_____

Application for Job:

None ..... ___
Few ..... ___
Persistent ..... ___

Nature _____

Registered with U.S.E.S. Yes ___ No.___

Where?_____

REFERENCES

Name _____

Address _____

Occupation _____

Name _____

Address _____

Occupation _____

Name _____

Address _____

Occupation _____

AFFILIATIONS

Lodge _____

Address _____

Union _____

Address _____

Church _____

Address _____

Other _____

_____

_____

INTERVIEWER'S IMPRESSION

General:

Favorable .... ___
Ordinary ..... ___
Repugnant .... ___

Dress:

Immaculate ... ___ Careless ... ___
Appropriate .. ___ Extreme .... ___
Neat ..... ___ Unkempt .... ___

Grammar:

Good ..... ___ Poor ..... ___
Fair ..... ___ Foreign .... ___

Attitude:

Cooperative .. ___ Indifferent. ___
Antagonistic . ___ Self-Pity .. ___

Mentality:

Above average ___
Average ..... ___
Low ..... ___

REHABILITATION REQUIREMENTS

Examinations:

Medical ..... ___
Psychiatric ..... ___
Psychological ..... ___

Physical Restoration:

Medical Care ..... ___
Surgical Treatment ..... ___
Psychiatric Treatments .... ___
Dental Treatments ..... ___
Hospitalization ..... ___
Therapy ..... ___
Appliances ..... ___

Training:

Tuition ..... ___
Books and Supplies ..... ___
Maintenance ..... ___
Travel ..... ___

Occupational License ..... ___
Occupational Tools ..... ___

COMMENTS

Place of interview:

Office __ Home __ Hospital __
School __ Other _____

_____
Interviewer

Form VR: PR: 3c
(Formerly R-3c)

FEDERAL SECURITY AGENCY
OFFICE OF VOCATIONAL REHABILITATION
WASHINGTON 25, D. C.

311

MEDICAL REPORT

VISUAL DISABILITY

To Examiner: Please send completed report to _____

Name of patient _____ Address _____

SECTION I.—REPORT OF EXAMINATION

VISUAL ACUITY—Snellen notations (20 feet for distance; 14 inches for reading):

1. Distance: (*a*) Without glasses: (*b*) With best correction: (*c*) Percentage loss—with best correction:

R _____	R _____	R _____ %
L _____	L _____	L _____ %

2. Reading: (*a*) Without glasses: (*b*) With best correction: (*c*) Percentage loss—with best correction:

R _____	R _____	R _____ %
L _____	L _____	L _____ %

3. Refraction record: (*a*) Sphere: (*b*) Cylinder: (*c*) Axis:

R _____	R _____	R _____
L _____	L _____	L _____

(*d*) Is difference in spherical correction of the two eyes more than 3 diopters? _____

VISUAL FIELD: (Do not make detailed test unless indicated by preliminary test) Normal _____ Restricted _____
If restricted, or if scotomata are present, chart on back of form and describe under pathology.

MUSCLE FUNCTION: (Do not make detailed test unless indicated by preliminary test) Normal _____ Restricted _____
If restricted, chart the motor field on back of form and describe under pathology.

BINOCULAR FUNCTION:

1. Does patient have useful binocular vision in all directions—with glasses?

   For distance _____ For near _____

2. If patient does not have useful binocular vision, give reason and explain any handicap arising therefrom

_____

_____

Is depth perception present? _____

16—13519-2

SECTION I.—REPORT OF EXAMINATION—Continued

COLOR PERCEPTION: Normal _____ Color blind _____

If color blind, for what colors? _____

WASSERMANN REPORT—Results, if secured _____

If not secured, is test recommended? _____

SECTION II.—DIAGNOSIS

1. Eye pathology (Primary *and* Secondary conditions) _____

2. Primary and contributory causes of condition _____

3. Characteristics of condition (check): Stable _____ Progressive _____ Improving _____
   Recurrent _____ Permanent _____ Communicable _____

SECTION III.—PROGNOSIS AND RECOMMENDATIONS

1. Prognosis as to future developments of condition _____

2. Treatment recommended—Medical or other therapy _____

3. Are glasses recommended? _____ If so, please attach prescription.

4. Precautions that should be taken in training or placement of patient in employment:
   (*a*) As to types of activity to be avoided _____
   (*b*) As to working conditions to be avoided _____

5. Remarks: _____

Place _____ _____
(Signature of examiner)

Date _____, 194____ _____

16—13519

TABLES AND CHARTS

NOTE.—The tables below are on the basis of examination at 20 feet for distant and at 14 inches for near vision. If the patient's eye condition is such that examination cannot be made at these distances the distances at which it is made should be shown *with* the distance at which a person having normal vision would be able to see the same test letters or characters, and the percentage loss should be calculated therefrom.

1. Table of Percentage **Loss** of Visual Efficiency Corresponding to Snellen Notations for Distance and for Reading (American Medical Association Standards), and to Jaeger Reading Test Card

FOR DISTANCE—	FOR READING—		PERCENTAGE LOSS	FOR DISTANCE—	FOR READING—		PERCENTAGE LOSS
At 20 Feet, Snellen Notations A. M. A. Chart	At 14 Inches, Snellen Notations A. M. A. Card	By Test on Jaeger Card		At 20 Feet, Snellen Notations A. M. A. Chart	At 14 Inches, Snellen Notations A. M. A. Card	By Test on Jaeger Card	
20/20	14/14	No. 1	No loss	20/90	14/63		46.6
20/25	14/17.5		4.3	20/100	14/70	No. 11	51.1
20/30	14/21	No. 2	8.5	20/110			55.0
20/35	14/24.5	No. 3	12.5	20/120	14/84	No. 12	59.1
20/40	14/28	No. 4	16.4	20/140	14/98	No. 14	65.8
20/45	14/31.5	No. 5	20.0	20/160	14/112	No. 16	71.4
20/50	14/35	No. 6	23.5	20/200	14/140	No. 17	80.0
20/60	14/42	No. 8	30.0	20/240	14/168	No. 18	87.0
20/70	14/49	No. 9	36.0	20/320	14/224	No. 19	92.8
20/80	14/56	No. 10	41.5	20/480	14/336	No. 20	98.0

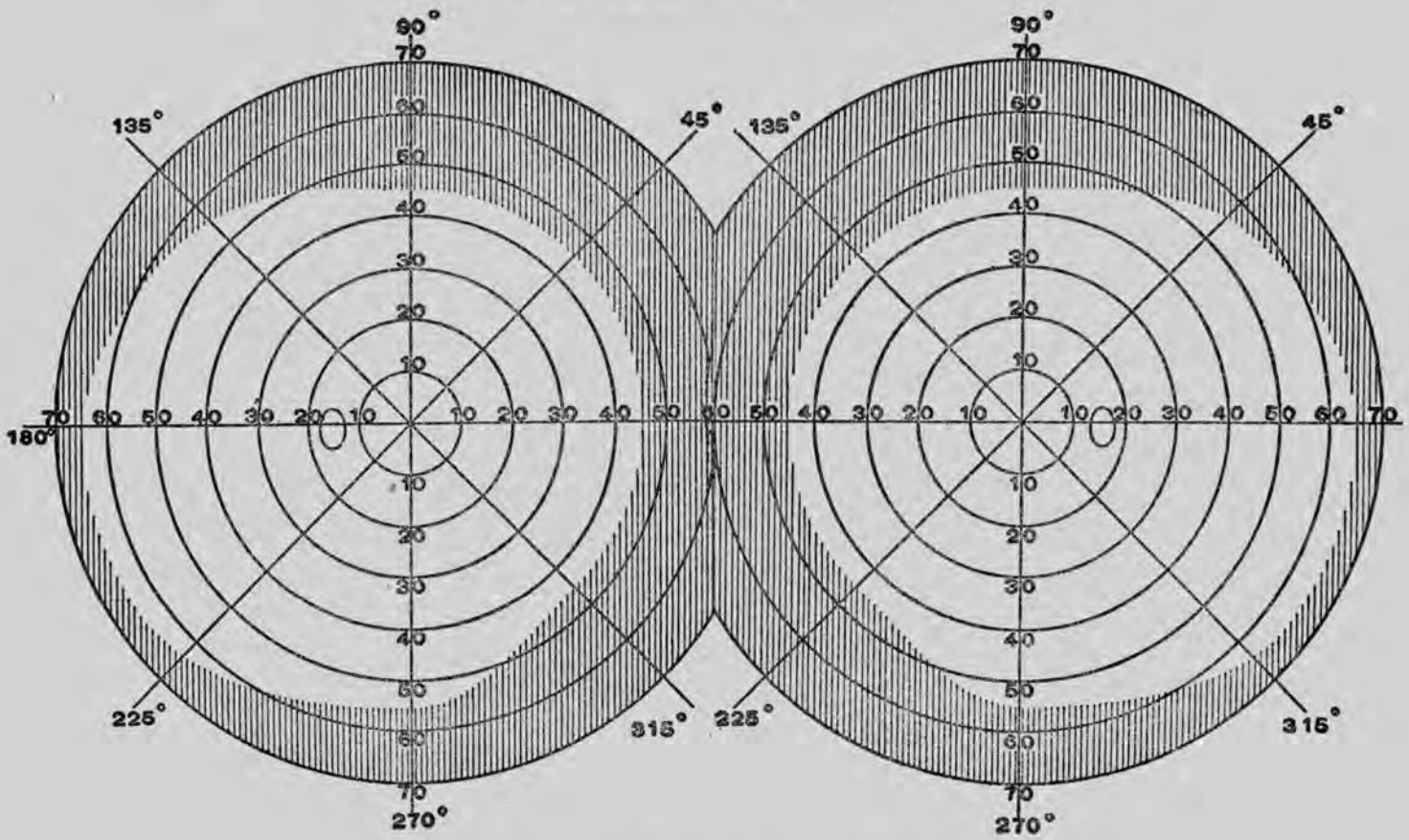
2. Table of **Loss** in Binocular Vision (Motor-Field Efficiency)

EXTENT OF LOSS	MOTOR-FIELD EFFICIENCY	EXTENT OF LOSS	MOTOR-FIELD EFFICIENCY
	Percent		*Percent*
No loss	100	11/20	67
1/20	98	12/20	63
2/20	95	13/20	59
3/20	92	14/20	55
4/20	89	15/20	50
5/20	87	16/20	45
6/20	84	17/20	39
7/20	81	18/20	32
8/20	77	19/20	22
9/20	74	20/20	0
10/20	71		

16—13519

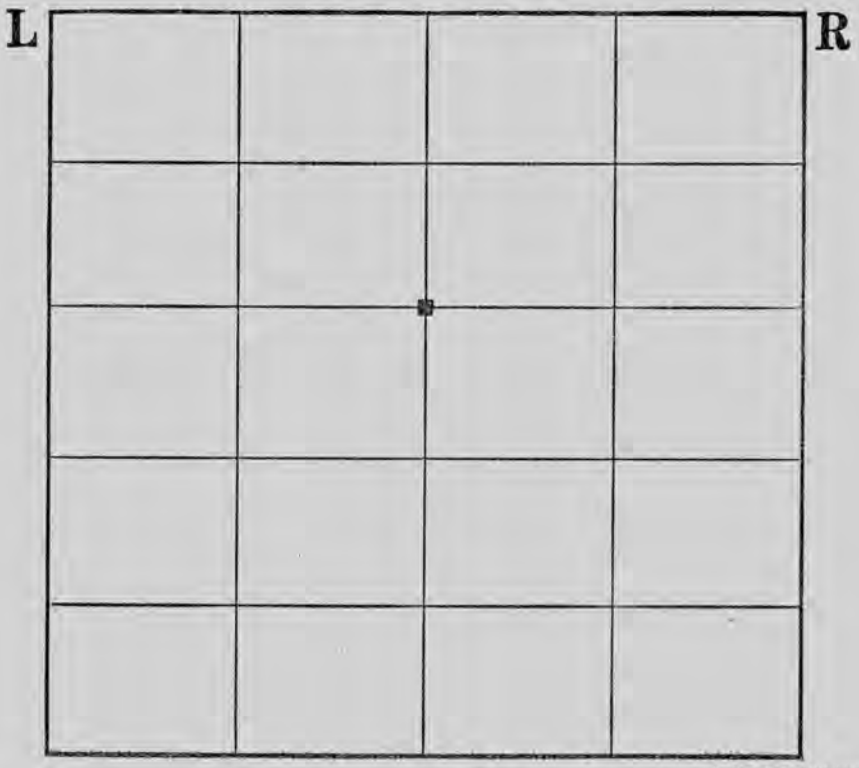
3. CHART OF VISUAL FIELD

(NOTE.—Visual field should be tested on a standard perimeter having a radius of 13 inches, white test object of 6 millimeters diameter)



4. CHART OF MOTOR FIELD

(NOTE.—Motor-field test chart should be 42 inches by 42 inches divided into rectangles approximately 10.5 inches by 8.5 inches. Test at 10 feet)



U. S. GOVERNMENT PRINTING OFFICE 16—13812

Form R-3d
FEDERAL SECURITY AGENCY
U. S. OFFICE OF EDUCATION
Washington

VOCATIONAL REHABILITATION DIVISION

MEDICAL REPORT

Hearing Disability

To EXAMINER: Please send completed report to .....

I. SPECIAL INFORMATION

Note.—This section to be filled in by rehabilitation agent or applicant prior to examination.

Name of applicant ..... Address .....

1. Age of applicant ..... years. Occupation .....
2. How long has applicant been hard of hearing? .....
3. How did it begin? .....

.....

4. Has hearing been *better*, *worse*, or *unchanged* in the past 6 months? .....

   In the past 2 years? .....
5. Is hearing worse at some times than at others? .....

   If so, under what conditions? .....

.....
6. Are any other members of the family hard of hearing, or deaf? .....

   If so, who? .....
7. Can applicant hear over telephone? .....
8. Does applicant—

   a. Hear better in noisy surroundings? .....

   b. Have difficulty in placing a sound or noise? .....

   c. Have head noises or ringing in the ears? .....

   d. Have spells of dizziness or difficulty in keeping balance in walking? .....

   If so, under what conditions? .....

   .....

   e. Get tired quickly? .....
9. Has applicant—

   a. Ever used a hearing aid? ..... When? .....

   Successfully or unsuccessfully? .....

   b. Ever lost a job, failed to get a job, or had to change jobs because of hearing condition? .....

   If so, explain .....

   .....

   c. Had training in lip reading? ..... If so, number of lessons .....

   Length of lesson periods ..... Private, or class lessons? .....

   Ability to read lips .....

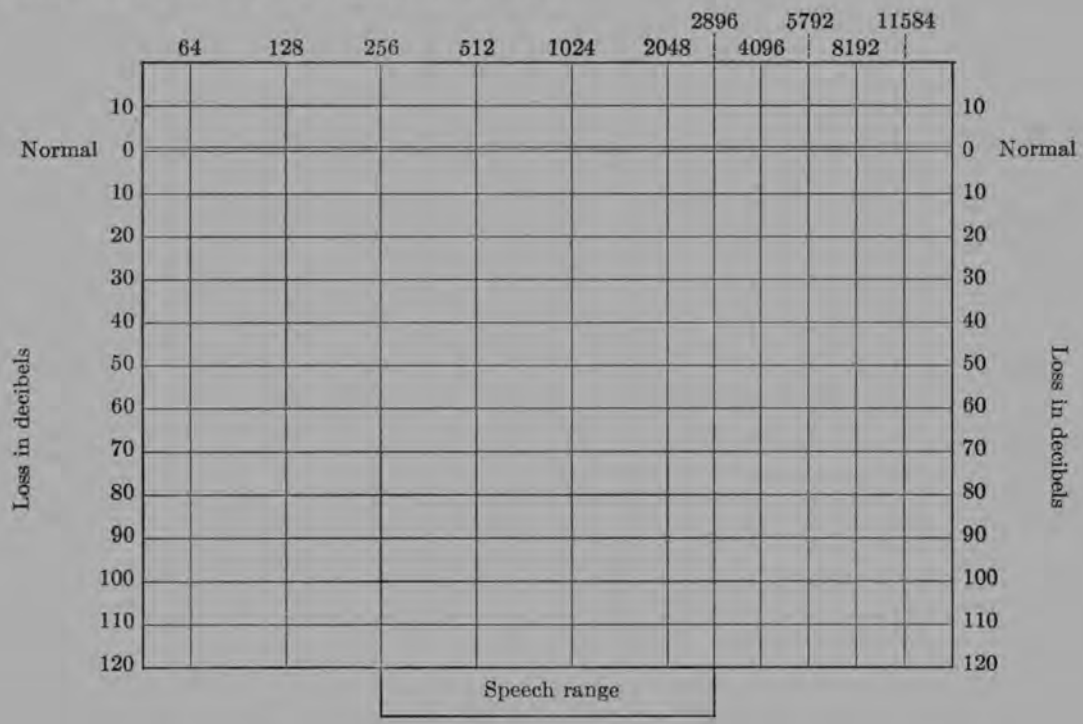
16—20298

II. EXAMINATION AND DIAGNOSIS

1. Functional Hearing Tests:

a. Audiometry: Instrument used .....

Note.—Please use "X" for right, "O" for left.



Decibel loss—average, speech range only (256 to 2,896 incl.):

Air: Right ..... dbs. Left ..... dbs. Bone: Right ..... dbs. Left ..... dbs.

Percentage loss—in speech range only (average decibel loss X 0.83):

Air: Right ..... % Left ..... % Bone: Right ..... % Left ..... %

Remarks: .....

.....

.....

b. Other hearing tests—kinds and results of each:

.....

.....

.....

.....

Estimated percentage loss (nonaudiometric tests): Right ear ..... % Left ear ..... %.

c. From examiner's experience with patient, at about what distance can patient hear and understand *normal* conversational voice?..... ft.

Remarks: .....

.....

d. Is patient's voice affected?..... If so, explain.....

.....

e. Is hearing *perception* impaired?.....

2. Results of Wassermann test—if secured .....

If not secured, is test recommended? .....

3. DIAGNOSIS:

a. Type of deafness: (check) Nerve ..... Conduction ..... Mixed ..... Otosclerosis .....

b. Pathology of hearing mechanism .....

c. Primary and contributory causes of condition .....

d. Characteristics of hearing condition (check those that apply):

Stable ..... Progressive ..... Improving ..... Recurrent ..... Permanent .....

III. PROGNOSIS AND RECOMMENDATIONS

1. Prognosis as to future developments of condition .....

2. Treatment recommended—medical or other therapy .....

3. Is hearing aid recommended? ..... If so, suggestions as to *type* and specifications .....

4. Precautions that should be taken in the training or placement of patient in employment:

a. As to types of activity to be avoided .....

b. As to working conditions to be avoided .....

5. Is medical check-up advised? ..... If so, how often? .....

REMARKS: .....

Place ..... (Signature of examiner) .....

Date ..... (Title) .....

U. S. GOVERNMENT PRINTING OFFICE 16—20208

Form R-3b

FEDERAL SECURITY AGENCY

OFFICE OF VOCATIONAL REHABILITATION

WASHINGTON 25, D. C.

MEDICAL REPORT

Cardiac Disability

TO PHYSICIAN, HOSPITAL, OR CLINIC:

The information requested concerning this patient is to be used to determine his (her) eligibility for vocational rehabilitation service and as a guide in providing such service if he (she) is found to be eligible. All information will be held strictly confidential.

Please follow the American Heart Association standards for examination and classification.

Name of patient _____ *Address* _____

I. DIAGNOSIS:

1. Cause _____ Date of onset _____

2. Structural lesions _____

_____

3. Manifestations _____

_____

4. Blood pressure: Systolic _____ Diastolic _____

Normal, for patient's age: Systolic _____ Diastolic _____

REMARKS: _____

_____

5. If arteriosclerosis is present—stage (check): Moderate _____ Advanced _____

Far advanced _____

6. Characteristics of heart condition (check): Stable _____ Progressive _____

Improving _____ Recurrent _____ Permanent _____

REMARKS: _____

_____

7. Can functioning be improved by treatment? _____

If so, nature _____

Treatment now being given _____

16—13526-2

II. PROGNOSIS:

(*a*) As to improvement—

With treatment _____

Without treatment _____

(*b*) As to longevity and general health—

With treatment _____

Without treatment _____

(*c*) As to work capacity (in a moderately active job)—

With treatment _____

Without treatment _____

III. PRESENT EMPLOYABILITY:

1. Functional capacity and therapeutic classification _____

NOTE.—Standard classifications (American Heart Association).

2. Can patient safely return to former job? _____

3. Could patient now safely be placed in training (for employment) on a full-time schedule? _____ Part-time? _____

Number of hours per day recommended _____

4. Precautions to be taken as to—

(*a*) Types of activity to be avoided _____

_____

(*b*) Working conditions to be avoided _____

_____

(*c*) Is medical check-up necessary? _____ If so, how often? _____

_____

IV. OTHER DEFECTS:

1. Does patient, to his or your knowledge, have any defect of—

Vision _____ Hearing _____ Limbs or spine _____ Lungs _____

Circulatory system _____ Digestive system _____ Genito-urinary region _____

Suggestions as to further examination or treatment of defects _____

_____

_____

2. Has patient any symptoms of mental or emotional abnormality _____

If so, describe briefly _____

_____

_____

V. RECOMMENDATIONS:

_____

_____

_____

_____

Place _____

Date _____

_____

(Signature of physician or of hospital or clinic official)

U. S. GOVERNMENT PRINTING OFFICE 16—13526-1

Form R-3a—Rev. 1944
FEDERAL SECURITY AGENCY
OFFICE OF VOCATIONAL REHABILITATION
Washington

VOCATIONAL REHABILITATION
DISTRICT OF COLUMBIA REHABILITATION SERVICE

MEDICAL REPORT
PULMONARY TUBERCULOSIS

To SANATORIUM, CLINIC, OR PHYSICIAN:

Please give all information that applies to your treatment or observation of this patient. Reexamination is requested if patient has not had a clinical examination within past 3 months.

Please follow National Tuberculosis Association Diagnostic Standards, Latest Edition.

Name of patient ..... Address .....

Permanent address .....

SECTION I.—ADMISSIONS AND DISCHARGES

NOTE.—*Last admission* applies to the beginning of last period of treatment or observation by private specialist as well as to last admission to sanatorium or clinic.

1. Dates: Last admission ....., 19..... Last discharge ....., 19.....

   Discharged: With consent ..... Without consent ..... Disciplinary .....

   If disciplinary, explain: .....

2. Diagnosis on last admission: (*a*) Stage .....

   (*b*) Location ..... (*c*) Type of lesion (Predominant): .....

3. Previous admissions:

   (*a*) Number .....

   (*b*) Dates and reasons for discharge:

   ..... to ....

   ..... to ....

SECTION II.—TREATMENT GIVEN

1. Bed rest only ..... months. 2. Clinical observation only ..... months.

3. Collapse therapy: (*a*) Pneumothorax—Date initiated ....., 19..... (*b*) Pneumolysis ..... (*c*) Phrenic-temporary ..... Permanent ..... (*d*) Thoracoplasty—Number of stages ..... Date, last ....., 19.....

   (*e*) Other (specify) .....

4. Exercise: Over a period of ..... months.

   At discharge, or at present if still under treatment: On exercise for ..... hours per day for ..... months.

SECTION III.—PRESENT STATUS OF PATIENT
On basis of last examination

NOTE.—*Last examination* applies to examination at discharge, the latest examination of a patient still under treatment or observation, or the reexamination of a patient who has not had a clinical examination for 3 months or more.

1. DATE: Last examination ....., 19.....

2. SPUTUM: None ..... Positive ..... Negative .....; negative, consistently? ..... Intermittently? .....

   How long? ..... months.

16—18618-1

SECTION III.—PRESENT STATUS OF PATIENT—Continued

3. CONSTITUTIONAL SYMPTOMS: Absent? ..... How long? ..... months

4. X-RAY (or Fluoroscopy): Stationary? ..... How long? ..... months.

Lesions apparently healed? ..... How long? ..... months.

Cavity closed? ..... How long? ..... months.

Emphysema: None ..... Slight ..... Moderate ..... Extensive .....

5. CLINICAL CLASSIFICATION: Active ..... Quiescent ..... Apparently arrested ..... Arrested .....

6. GENERAL PHYSICAL CONDITION: Good ..... Fair ..... Poor .....; weight ..... pounds.

7. TREATMENT NOW BEING GIVEN .....

8. COMPLICATIONS OR OTHER PHYSICAL DEFECTS—Nature and location: .....

.....

.....

9. If still under treatment, about when is discharge expected? .....

After discharge, where and by whom will follow-up be carried out? .....

.....

Treatment recommended after discharge .....

10. EMPLOYABILITY STATUS: (*a*) Previous occupation .....

Characteristics of job .....

Advisability of patient's return to this job .....

(*b*) Proposed employment objective .....

Characteristics of job .....

Feasibility of this job from a physical standpoint? .....

Would it be *inadvisable* for other than physical reasons? .....

(*c*) Recommended schedule for training or placement: Full-time schedule? ..... Part-time? ..... If part-time, number of hours per day recommended ..... Number of weeks to work up to full-time schedule .....

SECTION IV.—PROGNOSIS

1. Opinion as to general resistance .....

2. Probable ultimate work capacity (check):

Full-time, acceptable conditions ..... Full-time, sheltered conditions .....

Part-time, acceptable conditions ..... Part-time, sheltered conditions .....

3. Remarks: .....

.....

.....

.....

.....

.....

.....

Place ..... Signature ..... M. D.

Date ..... Title .....

U. S. GOVERNMENT PRINTING OFFICE 16—18018

Form R-3e

STATE BOARD FOR VOCATIONAL EDUCATION
210 State Office Building
Denver, Colorado

VOCATIONAL REHABILITATION SERVICE

MEDICAL REPORT
Orthopedic and Miscellaneous Disabilities

TO PHYSICIAN, HOSPITAL, OR CLINIC:

The information requested concerning this physically disabled person is to be used to determine his (her) eligibility for vocational rehabilitation service and as a guide in providing such service if the person is found to be eligible. All information will be held strictly confidential.

Name of patient_____ Address_____

I. MAJOR DISABILITY—

(a) Description as to nature and condition _____

_____

_____

_____

_____

_____

_____

(b) Cause of disability _____ Date of onset _____

(c) Complications _____

(d) Characteristics of disability (check): Stable _____ Progressive _____
Improving _____ Recurrent _____ Permanent _____ Infectious _____

(e) Degree of residual functioning of part affected (check): Good _____
(Fair _____ Poor _____ Very poor _____ None _____)

(f) Can functioning be improved: By medical or surgical treatment? _____
If so, nature _____
By prosthetic appliance, kind _____
By other therapy, kind _____

II. PROGNOSIS—

(a) As to improvement in physical condition:
With treatment _____
Without treatment _____

(b) As to longevity and general health:
With treatment _____
Without treatment _____

(c) As to work capacity (in a physically active job):
With treatment _____
Without treatment _____

(over)

III. PRECAUTIONS TO BE TAKEN AS TO—

(a) Types of activity to be avoided _____

_____

_____

(b) Working conditions to be avoided _____

_____

_____

(c) Is medical check-up necessary?_____ If so, how often? _____
Is patient now physically fit to enter employment or to enter training for employment on a full-time basis? _____ If not, why? _____

_____

_____

IV. CONDITION OF THE FOLLOWING — Secondary to major disability (rate without diagnosis as Good, Fair, Poor, Very poor)—

(a) Vision _____ (b) Hearing _____ (c) Heart _____

(d) Lungs _____ (e) Circulatory system _____

(f) Digestive system _____ (g) Genito-urinary region _____

Has patient any symptons of mental or emotional abnormality?_____

If so, describe _____

_____

_____

Wassermann report -- if secured _____

Recommendations as to further examination, or treatment for any of these conditions _____

V. SOURCE OF INFORMATION (check)—

Recent examination of patient _____ Physician's office record _____

Hospital or clinic record _____ If from records, give date of last treatment _____

VI. RECOMMENDATIONS: _____

_____

_____

_____

_____

_____

Place _____

Date _____ _____

(Signature of physician or of hospital or clinic official)

STATE BOARD FOR VOCATIONAL EDUCATION
210 STATE OFFICE BUILDING
DENVER 2, COLORADO

318 VR-4

VOCATIONAL REHABILITATION DIVISION

FINANCIAL STATUS OF APPLICANT

At what job are you now employed..... Salary (wkly.) $_____

Name of employer?.....

Address?.....

Do you have a bank account?..... What amount? $_____

Do you own any real-estate?.....Indebtedness $_____ Value..... $_____

Do you receive unemployment compensation?..... Amount (wkly.) $_____

Do you receive workmen's compensation?..... Amount (wkly.) $_____

Length of time compensation will run?.....

Do you carry life insurance?.....Annual premiums $_____ Policy value? $_____

Health & Accident Insurance?.....Premiums paid $_____

Blue Cross?.....Premiums paid $_____

Other?.....Premiums paid $_____

Do you receive public assistance?.....Amount $_____

What other assistance?.....Amount $_____

Do you have any other income?.....

What?..... Amount..... $_____

What are the earnings of your family?..... Amount..... $_____

What assistance could you obtain from family?..... Amount..... $_____

If my financial status should change at any time while accepting services from the Rehabilitation Division of the State of Colorado, I will notify the Rehabilitation Division at once.

_____ _____
Signature of Parent or Guardian Signature of Applicant

A F F I D A V I T

_____ being first duly sworn on his oath deposes and says that the answers to the above questions are true of his own knowledge, and that they accurately represent his financial condition at this time.

_____

Subscribed and sworn to before me this _____ day of _____ A.D. 194__

_____
Notary

R 3
Revised 2-46

STATE OF COLORADO
THE STATE BOARD FOR VOCATIONAL EDUCATION
VOCATIONAL REHABILITATION

319

GENERAL BASIC MEDICAL EXAMINATION RECORD

This record is
CONFIDENTIAL

PLEASE SEND REPORT TO:

Section I.—(To be filled out by Rehabilitation Agency)

_____ (Last name) _____ (First name) _____ (Middle name) _____ (Date of birth) _____ (Race) _____ (Sex) S___ M___ W___ D___ Sep.___ (Marital status)

_____ (Home address: Street and number or R. F. D.) _____ (City or town) _____ (County) _____ (State)

Usual occupation _____ Description of last job _____

Last time hospitalized _____ (Date) _____ (Reason) _____ (Name and location of hospital)

Last visit to physician _____ (Date) _____ (Reason) _____ (Name and address of physician)

Is patient now under care of physician? _____ (Yes or no) _____ (If answer is "Yes," give name and address of physician)

Patient's statement of disabilities present disabilities _____

HAS PATIENT SUFFERED FROM ANY OF THE FOLLOWING: (0=No; √=Yes)

____ Frequent headaches	____ Pain in chest	____ Hemorrhoids	____ Tuberculosis
____ Difficulty with vision	____ Shortness of breath	____ Burning on urination	____ Convulsions or "fits"
____ Difficulty with hearing	____ Unusual irritability	____ Blood in urine	____ Hernia or "rupture"
____ Fainting	____ Fever or night sweats	____ Rheumatism	____ Varicose veins or ulcers
____ Excessive fatigue	____ Swollen ankles	____ Fractures (*Describe*) _____	
____ Asthma or hay fever	____ Difficulty in thinking	_____	
____ Nervous breakdown	____ Loss of appetite	____ Operations (*Describe*) _____	
____ Unusual gain or loss of weight	____ Frequent indigestion	_____	
____ Persistent cough	____ Difficulty with memory	____ Accidents (*Describe*) _____	
____ Cough producing blood	____ Diarrhea or constipation	_____	

Signature of Rehabilitation Counselor _____ Date _____

Section II. PHYSICAL EXAMINATION.—(To be filled out by physician. Items checked (√) were examined and found normal. Deviations from normal are noted. If items require additional description, please record on extra sheet.)

HEIGHT (without shoes), _____ ft. _____ in. WEIGHT (without clothing), _____ pounds. TEMPERATURE, _____° F.

EYES: Right _____ Left _____
(Discharge; corneal scars; strabismus; pterygium; ptosis; trachoma; fundi; cataract; intraocular tension)

Distant vision: Without glasses—R. 20/_____ L. 20/_____. With glasses—R. 20/_____ L. 20/_____
(If vision is too low to be recorded at 20 feet, indicate by recording as "less than 20/200")

EARS—Hearing: Right _____ (20 feet) Left _____ (20 feet) Other findings: R. _____ L. _____
(Consider denominators here indicated as normal. Record as numerators greatest distance heard)
(Evidence of middle ear or mastoid disease. Drums: Normal, absent, perforated, dull, retracted. Discharge)

NOSE _____ THROAT _____
(Obstruction. Evidence of chronic sinus infection, polypi, perforated septum, etc.) (Tonsils: Normal, enlarged, removed, etc.)

MOUTH _____ NECK _____
(Missing teeth, pyorrhea; abnormality of tongue or palate) (Thyroid enlargement, nodules, etc.)

LYMPHATIC SYSTEM _____ BREASTS _____
(Especially cervical, epitrochlear, inguinal) (Abnormal discharge, nodules, tenderness, hypoplasia)

LUNGS: Right _____ Left _____
(If history or physical findings indicate active or arrested tuberculosis, recommend chest X-ray, sputum examination, and consultation with chest specialist)

(OVER)

16—41874-1

CIRCULATORY SYSTEM: Heart _____
(Enlargement, thrill, murmurs, rhythm)

Blood pressure { Systolic / Diastolic } _____ Pulse rate _____ Dyspnoea _____ Cyanosis _____ Edema _____

Evidence of arteriosclerosis _____
(Type; degree; where found, as "cerebral," "brachial," etc.)

ABDOMEN _____
(Scars, masses, palpable liver, palpable spleen, etc.)

HERNIA _____
(Type: Inguinal, ventral, femoral, etc. Right, left, bilateral)

GENITO-URINARY and GYNECOLOGICAL _____
(Urethral discharge, varicocele, hydrocele, scars, epididymitis, enlarged or atrophic testicle)
(Prolapse, cystocele, rectocele. Cervix)

ANO-RECTAL _____
(Hemorrhoids, prolapse, fissures, fistula. Prostate)

NERVOUS SYSTEM _____
(Paralysis. Sensation. Speech. Gait. Reflexes: Pupillary, knee, Babinski, Romberg)

_____
(Memory. Peculiar ideas or behavior. Spirits: Elated, depressed, normal)

_____
(Neurological or psychiatric abnormalities should be described on separate sheet)

SKIN _____ (Moist, dry, clear) FEET _____ (Weak feet. Congenital or traumatic defects) VARICOSE VEINS _____ (Site)

ORTHOPEDIC IMPAIRMENTS: (*Describe*) _____

_____

LABORATORY: Blood serologic test for syphilis—Date _____ Name of test _____ Result _____
Urinalysis: Date _____ Specific gravity _____ Reaction _____ Albumen _____ Sugar _____

DIAGNOSIS: (Indicate major and minor disabilities) _____

_____

CHARACTERISTICS OF MAJOR DISABILITY: (Check appropriate terms) Permanent _____ Temporary _____ Stable _____
Slowly progressive _____ Rapidly progressive _____ Improving _____

CAN THE MAJOR DISABILITY BE REMOVED BY TREATMENT: ☐ (Yes) ☐ (No) SUBSTANTIALLY REDUCED BY TREATMENT: ☐ (Yes) ☐ (No)

PHYSICAL CAPACITIES: (Under "Physical activities" and "Working conditions" use symbols as follows:
(√) No limitation. (X) Limitation (0) To be avoided)

Physical activities: Walking _____ Standing _____ Stooping _____ Kneeling _____ Lifting _____ Reaching _____ Pushing _____
Pulling _____ Other (*Specify*) _____

Working conditions: Outside _____ Inside _____ Humid _____ Dry _____ Dusty _____ Sudden temperature changes _____
Other (*Specify*) _____

RECOMMENDATIONS:

☐ Is examination by specialist advisable for completeness of diagnosis or prognosis? If so, specify which specialty _____

_____

☐ Refraction ☐ X-ray of chest ☐ Other diagnostic procedures (*Specify*) _____

☐ Prosthetic appliances (*Specify*) _____

☐ Hospitalization (*Specify reasons and approximate duration*) _____

☐ Treatment (*Specify type and approximate duration*) _____

REMARKS: Please use additional sheet for remarks and expansion of any of the above items.

Date _____

_____ M. D.
(Physician)

_____
(Address)

U. S. GOVERNMENT PRINTING OFFICE 16—41374-1

Form R-3a—Rev. 1944
FEDERAL SECURITY AGENCY
OFFICE OF VOCATIONAL REHABILITATION
Washington

320

VOCATIONAL REHABILITATION
DISTRICT OF COLUMBIA REHABILITATION SERVICE

MEDICAL REPORT
PULMONARY TUBERCULOSIS

TO SANATORIUM, CLINIC, OR PHYSICIAN:

Please give all information that applies to your treatment or observation of this patient. Reexamination is requested if patient has not had a clinical examination within past 3 months.

Please follow National Tuberculosis Association Diagnostic Standards, Latest Edition.

Name of patient ..... Address .....

Permanent address .....

SECTION I.—ADMISSIONS AND DISCHARGES

NOTE.—*Last admission* applies to the beginning of last period of treatment or observation by private specialist as well as to last admission to sanatorium or clinic.

1. Dates: Last admission ....., 19..... Last discharge ....., 19.....

   Discharged: With consent ..... Without consent ..... Disciplinary .....

   If disciplinary, explain: .....

2. Diagnosis on last admission: (*a*) Stage .....

   (*b*) Location ..... (*c*) Type of lesion (Predominant): .....

3. Previous admissions:

   (*a*) Number .....

   (*b*) Dates and reasons for discharge:

   ..... to ....

   ..... to ....

SECTION II.—TREATMENT GIVEN

1. Bed rest only ..... months. 2. Clinical observation only ..... months.

3. Collapse therapy: (*a*) Pneumothorax—Date initiated ....., 19..... (*b*) Pneumolysis ..... (*c*) Phrenic-temporary ..... Permanent ..... (*d*) Thoracoplasty—Number of stages ..... Date, last ....., 19.....

   (*e*) Other (specify) .....

4. Exercise: Over a period of ..... months.

   At discharge, or at present if still under treatment: On exercise for ..... hours per day for ..... months.

SECTION III.—PRESENT STATUS OF PATIENT
On basis of last examination

NOTE.—*Last examination* applies to examination at discharge, the latest examination of a patient still under treatment or observation, or the reexamination of a patient who has not had a clinical examination for 3 months or more.

1. DATE: Last examination ....., 19.....

2. SPUTUM: None ..... Positive ..... Negative .....; negative, consistently? ..... Intermittently? .....

   How long? ..... months.

SECTION III.—PRESENT STATUS OF PATIENT—Continued

3. CONSTITUTIONAL SYMPTOMS: Absent? ..... How long? ..... months.

4. X-RAY (or Fluoroscopy): Stationary? ..... How long? ..... months.

Lesions apparently healed? ..... How long? ..... months.

Cavity closed? ..... How long? ..... months.

Emphysema: None ..... Slight ..... Moderate ..... Extensive .....

5. CLINICAL CLASSIFICATION: Active ..... Quiescent ..... Apparently arrested ..... Arrested .....

6. GENERAL PHYSICAL CONDITION: Good ..... Fair ..... Poor .....; weight ..... pounds.

7. TREATMENT NOW BEING GIVEN .....

8. COMPLICATIONS OR OTHER PHYSICAL DEFECTS—Nature and location: .....

.....

.....

9. If still under treatment, about when is discharge expected? .....

After discharge, where and by whom will follow-up be carried out? .....

.....

Treatment recommended after discharge .....

10. EMPLOYABILITY STATUS: (*a*) Previous occupation .....

Characteristics of job .....

Advisability of patient's return to this job .....

(*b*) Proposed employment objective .....

Characteristics of job .....

Feasibility of this job from a physical standpoint? .....

Would it be *inadvisable* for other than physical reasons? .....

(*c*) Recommended schedule for training or placement: Full-time schedule? ..... Part-time? ..... If part-time, number of hours per day recommended ..... Number of weeks to work up to full-time schedule .....

SECTION IV.—PROGNOSIS

1. Opinion as to general resistance .....

2. Probable ultimate work capacity (check):

Full-time, acceptable conditions ..... Full-time, sheltered conditions .....

Part-time, acceptable conditions ..... Part-time, sheltered conditions .....

3. Remarks: .....

.....

.....

.....

.....

.....

.....

Place ..... Signature ..... M. D.

Date ..... Title .....

U. S. GOVERNMENT PRINTING OFFICE 16—18618

Form R-8b

FEDERAL SECURITY AGENCY

OFFICE OF VOCATIONAL REHABILITATION

WASHINGTON 25, D. C.

MEDICAL REPORT

Cardiac Disability

TO PHYSICIAN, HOSPITAL, OR CLINIC:

The information requested concerning this patient is to be used to determine his (her) eligibility for vocational rehabilitation service and as a guide in providing such service if he (she) is found to be eligible. All information will be held strictly confidential.

Please follow the American Heart Association standards for examination and classification.

Name of patient _____ *Address* _____

I. DIAGNOSIS:

1. Cause _____ Date of onset _____

2. Structural lesions _____

_____

3. Manifestations _____

_____

4. Blood pressure: Systolic _____ Diastolic _____

Normal, for patient's age: Systolic _____ Diastolic _____

REMARKS: _____

_____

5. If arteriosclerosis is present—stage (check): Moderate _____ Advanced _____

Far advanced _____

6. Characteristics of heart condition (check): Stable _____ Progressive _____

Improving _____ Recurrent _____ Permanent _____

REMARKS: _____

_____

7. Can functioning be improved by treatment? _____

If so, nature _____

Treatment now being given _____

16—13526-2

II. PROGNOSIS:

(*a*) As to improvement—

With treatment _____

Without treatment _____

(*b*) As to longevity and general health—

With treatment _____

Without treatment _____

(*c*) As to work capacity (in a moderately active job)—

With treatment _____

Without treatment _____

III. PRESENT EMPLOYABILITY:

1. Functional capacity and therapeutic classification _____

NOTE.—Standard classifications (American Heart Association).

2. Can patient safely return to former job? _____

3. Could patient now safely be placed in training (for employment) on a full-time schedule? _____ Part-time? _____

Number of hours per day recommended _____

4. Precautions to be taken as to—

(*a*) Types of activity to be avoided _____

_____

(*b*) Working conditions to be avoided _____

_____

(*c*) Is medical check-up necessary? _____ If so, how often? _____

_____

IV. OTHER DEFECTS:

1. Does patient, to his or your knowledge, have any defect of—

Vision _____ Hearing _____ Limbs or spine _____ Lungs _____

Circulatory system _____ Digestive system _____ Genito-urinary region _____

Suggestions as to further examination or treatment of defects _____

_____

_____

2. Has patient any symptoms of mental or emotional abnormality _____

If so, describe briefly _____

_____

_____

V. RECOMMENDATIONS:

_____

_____

_____

_____

Place _____

Date _____ _____

(Signature of physician or of hospital or clinic official)

U. S. GOVERNMENT PRINTING OFFICE 16—13526-1

Form VR: PR: 3c
(Formerly R-3c)

FEDERAL SECURITY AGENCY
OFFICE OF VOCATIONAL REHABILITATION
WASHINGTON 25, D. C.

322

MEDICAL REPORT

VISUAL DISABILITY

To Examiner: Please send completed report to _____

Name of patient _____ Address _____

SECTION I.—REPORT OF EXAMINATION

VISUAL ACUITY—Snellen notations (20 feet for distance; 14 inches for reading):

1. Distance: (*a*) Without glasses: (*b*) With best correction: (*c*) Percentage loss—with best correction:

	(*a*)	(*b*)	(*c*)
R	_____	_____	_____%
L	_____	_____	_____%

2. Reading: (*a*) Without glasses: (*b*) With best correction: (*c*) Percentage loss—with best correction:

	(*a*)	(*b*)	(*c*)
R	_____	_____	_____%
L	_____	_____	_____%

3. Refraction record: (*a*) Sphere: (*b*) Cylinder: (*c*) Axis:

	(*a*)	(*b*)	(*c*)
R	_____	_____	_____
L	_____	_____	_____

(*d*) Is difference in spherical correction of the two eyes more than 3 diopters? _____

VISUAL FIELD: (Do not make detailed test unless indicated by preliminary test) Normal ____ Restricted ____
If restricted, or if scotomata are present, chart on back of form and describe under pathology.

MUSCLE FUNCTION: (Do not make detailed test unless indicated by preliminary test) Normal ____ Restricted ____
If restricted, chart the motor field on back of form and describe under pathology.

BINOCULAR FUNCTION:

1. Does patient have useful binocular vision in all directions—with glasses?

   For distance _____ For near _____

2. If patient does not have useful binocular vision, give reason and explain any handicap arising therefrom

   _____

   _____

Is depth perception present? _____

SECTION I.—REPORT OF EXAMINATION—Continued

COLOR PERCEPTION: Normal _____ Color blind _____

If color blind, for what colors? _____

WASSERMANN REPORT—Results, if secured _____

If not secured, is test recommended? _____

SECTION II.—DIAGNOSIS

1. Eye pathology (Primary *and* Secondary conditions) _____

2. Primary and contributory causes of condition _____

3. Characteristics of condition (check): Stable _____ Progressive _____ Improving _____
   Recurrent _____ Permanent _____ Communicable _____

SECTION III.—PROGNOSIS AND RECOMMENDATIONS

1. Prognosis as to future developments of condition _____

2. Treatment recommended—Medical or other therapy _____

3. Are glasses recommended? _____ If so, please attach prescription.

4. Precautions that should be taken in training or placement of patient in employment:
   (*a*) As to types of activity to be avoided _____
   (*b*) As to working conditions to be avoided _____

5. Remarks: _____

Place _____ _____
(Signature of examiner)

Date _____, 194__ _____

16—13519

TABLES AND CHARTS

NOTE.—The tables below are on the basis of examination at 20 feet for distant and at 14 inches for near vision. If the patient's eye condition is such that examination cannot be made at these distances the distances at which it is made should be shown *with* the distance at which a person having normal vision would be able to see the same test letters or characters, and the percentage loss should be calculated therefrom.

1. Table of Percentage Loss of Visual Efficiency Corresponding to Snellen Notations for Distance and for Reading (American Medical Association Standards), and to Jaeger Reading Test Card

FOR DISTANCE—	FOR READING—		PERCENTAGE LOSS	FOR DISTANCE—	FOR READING—		PERCENTAGE LOSS
At 20 Feet, Snellen Notations A. M. A. Chart	At 14 Inches, Snellen Notations A. M. A. Card	By Test on Jaeger Card		At 20 Feet, Snellen Notations A. M. A. Chart	At 14 Inches, Snellen Notations A. M. A. Card	By Test on Jaeger Card	
20/20	14/14	No. 1	No loss	20/90	14/63		46.6
20/25	14/17.5		4.3	20/100	14/70	No. 11	51.1
20/30	14/21	No. 2	8.5	20/110			55.0
20/35	14/24.5	No. 3	12.5	20/120	14/84	No. 12	59.1
20/40	14/28	No. 4	16.4	20/140	14/98	No. 14	65.8
20/45	14/31.5	No. 5	20.0	20/160	14/112	No. 16	71.4
20/50	14/35	No. 6	23.5	20/200	14/140	No. 17	80.0
20/60	14/42	No. 8	30.0	20/240	14/168	No. 18	87.0
20/70	14/49	No. 9	36.0	20/320	14/224	No. 19	92.8
20/80	14/56	No. 10	41.5	20/480	14/336	No. 20	98.0

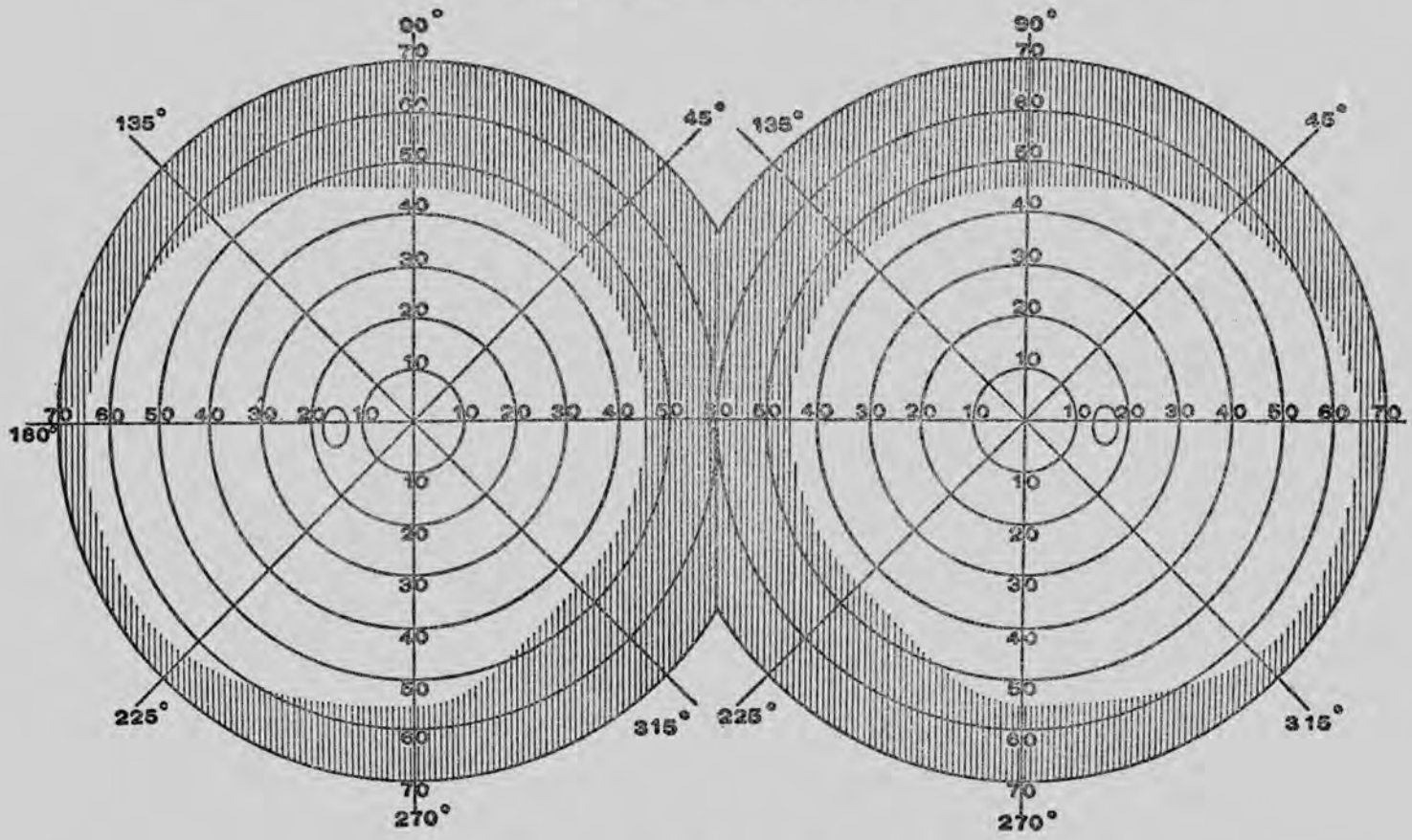
2. Table of Loss in Binocular Vision (Motor-Field Efficiency)

EXTENT OF LOSS	MOTOR-FIELD EFFICIENCY	EXTENT OF LOSS	MOTOR-FIELD EFFICIENCY
	Percent		*Percent*
No loss	100	11/20	67
1/20	98	12/20	63
2/20	95	13/20	59
3/20	92	14/20	55
4/20	89	15/20	50
5/20	87	16/20	45
6/20	84	17/20	39
7/20	81	18/20	32
8/20	77	19/20	22
9/20	74	20/20	0
10/20	71		

16—13519

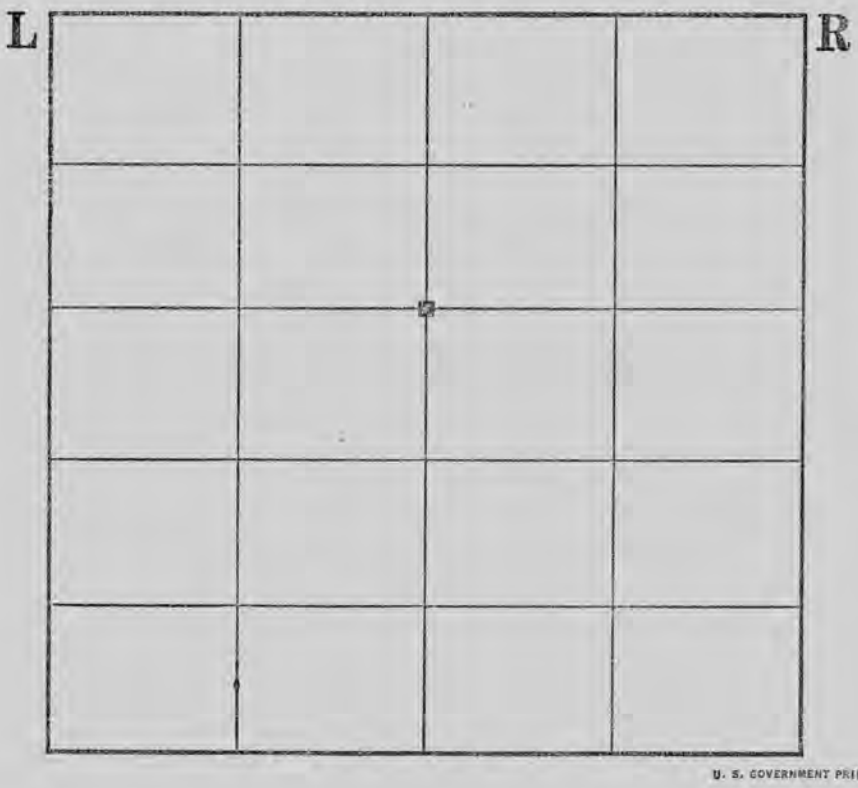
3. CHART OF VISUAL FIELD

(NOTE.—Visual field should be tested on a standard perimeter having a radius of 13 inches, white test object of 6 millimeters diameter)



4. CHART OF MOTOR FIELD

(NOTE.—Motor-field test chart should be 42 inches by 42 inches divided into rectangles approximately 10.5 inches by 8.5 inches. Test at 10 feet)



U. S. GOVERNMENT PRINTING OFFICE 16—13519

Form R-3d
FEDERAL SECURITY AGENCY
U. S. OFFICE OF EDUCATION
Washington

324

VOCATIONAL REHABILITATION DIVISION

MEDICAL REPORT

Hearing Disability

To EXAMINER: Please send completed report to .....

I. SPECIAL INFORMATION

Note.—This section to be filled in by rehabilitation agent or applicant prior to examination.

Name of applicant ..... Address .....

1. Age of applicant ..... years. Occupation .....
2. How long has applicant been hard of hearing? .....
3. How did it begin? .....

.....

4. Has hearing been *better*, *worse*, or *unchanged* in the past 6 months? .....

   In the past 2 years? .....
5. Is hearing worse at some times than at others? .....

   If so, under what conditions? .....

.....
6. Are any other members of the family hard of hearing, or deaf? .....

   If so, who? .....
7. Can applicant hear over telephone? .....
8. Does applicant—

   a. Hear better in noisy surroundings? .....

   b. Have difficulty in placing a sound or noise? .....

   c. Have head noises or ringing in the ears? .....

   d. Have spells of dizziness or difficulty in keeping balance in walking? .....

   If so, under what conditions? .....

   .....

   e. Get tired quickly? .....
9. Has applicant—

   a. Ever used a hearing aid? ..... When? .....

   Successfully or unsuccessfully? .....

   b. Ever lost a job, failed to get a job, or had to change jobs because of hearing condition? .....

   If so, explain .....

   .....

   c. Had training in lip reading? ..... If so, number of lessons .....

   Length of lesson periods ..... Private, or class lessons? .....

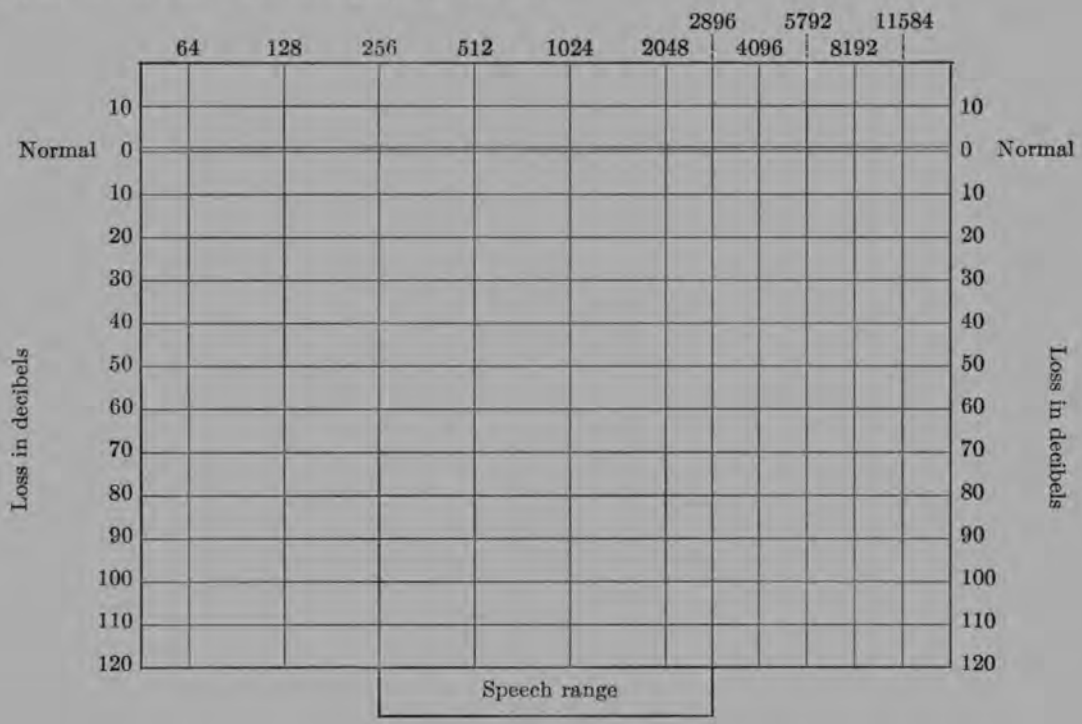
   Ability to read lips .....

II. EXAMINATION AND DIAGNOSIS

1. Functional Hearing Tests:

a. Audiometry: Instrument used .....

Note.—Please use "X" for right, "O" for left.



Decibel loss—average, speech range only (256 to 2,896 incl.):

Air: Right ..... dbs. Left ..... dbs. Bone: Right ..... dbs. Left ..... dbs.

Percentage loss—in speech range only (average decibel loss X 0.83):

Air: Right ..... % Left ..... % Bone: Right ..... % Left ..... %

Remarks: .....

.....

.....

b. Other hearing tests—kinds and results of each:

.....

.....

.....

.....

Estimated percentage loss (nonaudiometric tests): Right ear ..... % Left ear ..... %.

c. From examiner's experience with patient, at about what distance can patient hear and understand *normal* conversational voice?..... ft.

Remarks: .....

.....

d. Is patient's voice affected?..... If so, explain.....

.....

e. Is hearing *perception* impaired?.....

2. Results of Wassermann test—if secured _____

If not secured, is test recommended? _____

3. DIAGNOSIS:

a. Type of deafness: (check) Nerve _____ Conduction _____ Mixed _____ Otosclerosis _____

b. Pathology of hearing mechanism _____

c. Primary and contributory causes of condition _____

d. Characteristics of hearing condition (check those that apply):

Stable _____ Progressive _____ Improving _____ Recurrent _____ Permanent _____

III. PROGNOSIS AND RECOMMENDATIONS

1. Prognosis as to future developments of condition _____

2. Treatment recommended—medical or other therapy _____

3. Is hearing aid recommended? _____ If so, suggestions as to *type* and specifications _____

4. Precautions that should be taken in the training or placement of patient in employment:

a. As to types of activity to be avoided _____

b. As to working conditions to be avoided _____

5. Is medical check-up advised? _____ If so, how often? _____

REMARKS: _____

Place _____ (Signature of examiner) _____

Date _____ (Title) _____

U. S. GOVERNMENT PRINTING OFFICE 16—20298

STATE OF COLORADO
Vocational Rehabilitation

PLAN OF REHABILITATION
Part I
Preliminary Services

Area: _____

Name _____ County _____

Address _____

SERVICE RENDERED		P.P.	COST
Investigation	V 1		
Referred to other agency	V 1		
Guidance - Planning	V 1		
Compensation Adjustment	V 1		
Social Adjustment	V 1		
Employer Contact-for job	V 1		
Medical Examination	CS1		
Psychiatric Examination	CS2		
Transportation-Diagnosis	V 9		
Psychological Tests	V10		
Other	V11		

INITIAL DIAGNOSIS AND COUNSELING

Diagnosis of Disability-Client's statement

Medical Diagnosis

Extent of involvment

Medical Consultant's Report and Recommendations:

Recommendations carried out (List each service, giving details)

Eligible _____ Not Eligible _____ Accepted _____

Reason for Rejection: _____

APPROVED: _____ RECOMMENDED: _____
Supervisor of Physical Restoration Area Supervisor

Date: _____ Date: _____

STATE OF COLORADO
Vocational Rehabilitation

PLAN OF REHABILITATION
Part II
Physical Restoration

SERVICES TO BE RENDERED		P.P.	COST Est.	SERVICE AGENCIES
Medical Services				
Medical Treatment	CS 3			Physician _____
Psychiatric Treatment	CS 4			_____
Surgical Treatment	CS 5			
Dental Treatment	CS 6			
Other Treatment	CS 7			Hospital _____
Hospitalization	CS14			
Number of days_____				Anesthetist_____
Convalescent Home Care	CS15			
Number of days_____				Nurse _____
Physiotherapy	CS16			
Occupational Therapy	CS16			_____
Work Therapy	CS16			
Home Nursing Care	CS17			Therapist _____
Number of visits_____				
				_____
Other	CS29			
				_____
Appliances				Clinic _____
Artificial Limbs	CS 8			Dentist _____
Braces	CS 9			
Hearing Aid	CS10			Appliance Company _____
Glasses	CS11			
Artificial Eye	CS11			
Surgical Appliances	CS12			Other _____
Other	CS12			
Appliance repairs	CS13			Transportation: Bus __St.Car__Taxi__
				Private___R.R._____
Transportation	CS18			Other _____
Maintenance	CS19			
Total	$			Services to start on or about _____

APPROVED:_____ RECOMMENDED:_____
State Supervisor of Vocational Rehabilitation — Area Supervisor

Date:_____ Date: _____

_____
Supervisor, Physical Restoration

Date: _____

PLAN OF REHABILITATION VR-13c
Part III
Training

Area: _____

Name _____ County _____

Address _____

SERVICES TO BE RENDERED	P.P.	COST Est.
Educational Institution ...CS20		
Employment Training CS21		
Correspondence-Extension...CS22		
Tutorial CS23		
Training Supplies.....CS24		
Maintenance CS25		
Transportation.....CS26		
Placement Equipment CS27		
Occupational Licenses CS28		
TRAINING AGENCY		
Business College		
Private Trade School		
Public Vocational School.....		
College or University		
Business establishment		
College or University Extension		
Tutor		
Correspondence School		
Other		
KIND		
Prevocational		
Supplementary		
Home-Bound		
Complete Vocational		
Review-improvement		
Break-In		
Related Subject matter		
Lip Reading		
Other		
Total ..... $		

TRAINING PREPARATION

Objective _____

Subjects or operations _____

_____

_____

Training Agency _____

Address _____

Period _____ to _____

Tuition Rates:

University & Colleges Fall $_____
Winter $_____
Spring $_____
Summer $_____

Other _____ $_____

_____ $_____

Training Supplies _____ $_____

Paid to _____

Maintenance _____ $_____

Transportation _____ $_____

COSTS:

Preliminary	(Part I)	$_____
Physical Restoration	(Part II)	$_____
Training	(Part III)	$_____
Total		$_____

APPROVED: _____
State Supervisor of Vocational Rehabilitation

Date: _____

RECOMMENDED: _____
Area Supervisor

Date: _____

VR-13c

PLAN OF REHABILITATION
Part III
Training

Area:_____

Name_____ County_____

Address_____

SERVICES TO BE RENDERED	P.P.	COST Est.
Educational Institution ...CS20		
Employment Training CS21		
Correspondence-Extension...CS22		
Tutorial CS23		
Training Supplies.....CS24		
Maintenance CS25		
Transportation.....CS26		
Placement Equipment CS27		
Occupational Licenses CS28		
TRAINING AGENCY		
Business College		
Private Trade School		
Public Vocational School.....		
College or University		
Business establishment		
College or University Extension		
Tutor		
Correspondence School		
Other		
KIND		
Prevocational		
Supplementary		
Home-Bound		
Complete Vocational		
Review-improvement		
Break-In		
Related Subject matter		
Lip Reading		
Other		
Total ..... $		

TRAINING PREPARATION

Objective_____

Subjects or operations_____

_____

_____

Training Agency_____

Address_____

Period_____to_____

Tuition Rates:

University & Colleges Fall $_____

Winter $_____

Spring $_____

Summer $_____

Other_____ $_____

_____ $_____

Training Supplies_____ $_____

Paid to_____

Maintenance_____ $_____

Transportation_____ $_____

COSTS:

Preliminary	(Part I)	$_____
Physical Restoration	(Part II)	$_____
Training	(Part III)	$_____
Total		$_____

APPROVED:_____
State Supervisor of Vocational Rehabilitation

Date:_____

RECOMMENDED:_____
Area Supervisor

Date:_____

STATE OF COLORADO
Vocational Rehabilitation

PLAN OF REHABILITATION
Part II
Physical Restoration

SERVICES TO BE RENDERED		P.P.	COST Est.	SERVICE AGENCIES
Medical Services				
Medical Treatment	CS 3			Physician _____
Psychiatric Treatment	CS 4			
Surgical Treatment	CS 5			_____
Dental Treatment	CS 6			
Other Treatment	CS 7			Hospital _____
Hospitalization	CS14			
Number of days_____				Anesthetist_____
Convalescent Home Care	CS15			
Number of days_____				Nurse _____
Physiotherapy	CS16			
Occupational Therapy	CS16			_____
Work Therapy	CS16			
Home Nursing Care	CS17			Therapist _____
Number of visits_____				
				_____
Other	CS29			
				_____
Appliances				Clinic _____
Artificial Limbs	CS 8			Dentist _____
Braces	CS 9			
Hearing Aid	CS10			Appliance Company _____
Glasses	CS11			
Artificial Eye	CS11			
Surgical Appliances	CS12			Other _____
Other	CS12			
Appliance repairs	CS13			Transportation: Bus __St.Car__Taxi__
Transportation	CS18			Private___R.R._____
Maintenance	CS19			Other _____
Total		$		Services to start on or about _____

APPROVED:_____
State Supervisor of Vocational Rehabilitation

Date:_____

RECOMMENDED:_____
Area Supervisor

Date: _____

_____
Supervisor, Physical Restoration

Date: _____

STATE BOARD FOR VOCATIONAL EDUCATION
210 STATE OFFICE BUILDING
DENVER 2, COLORADO

VOCATIONAL REHABILITATION DIVISION

CONTRACT FOR SERVICES OF PHYSICIAN

PATIENT:_____ ADDRESS_____

TYPE OF OPERATION_____

I agree to perform the necessary surgery at a cost not to exceed $_____ This amount will cover the cost of operation and follow-up care. It is estimated that patient will remain in hospital for a period not to exceed _____ days.

Bills will be submitted in duplicate and charged to _____

_____.

Approved:

_____

Date_____

_____

Date_____

Signed:

_____
Physician

Date_____

Recommended by:

_____
Supervisor of Physical Restoration

Date_____

STATE BOARD FOR VOCATIONAL EDUCATION
210 STATE OFFICE BUILDING
DENVER 2, COLORADO

VOCATIONAL REHABILITATION DIVISION

CONTRACT FOR SERVICES OF ANESTHETIST

PATIENT:_____ ADDRESS_____

TYPE OF OPERATION_____

ANESTHESIA

Cyclopropane-Oxygen
Nitrous Oxid-Oxygen
Avertin
Somnoform
Ethyl Chloride-Ether
Subarachnoid (Spinal)
Intravenous
Other

I agree to administer necessary anesthesia at a cost not to exceed $_____

This amount to cover total cost for services rendered.

Bills will be submitted in duplicate and charged to_____

_____.

Approved:

_____

Date_____

_____

Date_____

Signed:

_____
Anesthetist

Date_____

Recommended by:

_____
Supervisor of Physical Restoration

Date_____

STATE BOARD FOR VOCATIONAL EDUCATION
210 STATE OFFICE BUILDING
DENVER 2, COLORADO

VOCATIONAL REHABILITATION DIVISION

CONTRACT FOR ORTHOPEDIC APPLIANCE

This agreement made this_____day of_____, 194___, by and between the

and_____
Name of Company

of_____for_____
City Type of Appliance

_____

to be fitted to_____Rehabilitation Client_____
City

at a cost not to exceed $_____.

The Appliance Company agrees:

1. To furnish required prosthesis of proper fit,guaranteed quality and workmanship.

2. To make all necessary adjustments or changes in appliance to insure proper fit, without further cost, during a four months period after date of delivery.

3. To instruct client in the proper care and use of the appliance and give assistance in the successful utilization.

4. To bill in duplicate for payment after acceptance of appliance by client.

agrees:

1. To pay the contracted price of the appliance upon receipt of bill, received in duplicate bearing signature of client acknowledging that the appliance has been accepted.

Approved:

_____

Date_____

_____

Date_____

Signed:

_____
Appliance Company

By_____
Representative of Appliance Company

Recommended by:

_____
Supervisor of Physical Restoration

VR-6

332

COLORADO STATE BOARD FOR VOCATIONAL EDUCATION

Division of Vocational Rehabilitation
210 State Office Building
Denver 2, Colorado

Duplicate

Case No.....

CONTRACT FOR TRAINING

SECTION I. THIS AGREEMENT, made this.....day of....., by and between The Colorado State Board for Vocational Education, ...Trainee, and.....Training Agency. For course of instruction beginning.....and ending.....

SECTION II. The Training Agency agrees:

1. To furnish a thorough course of institutional instruction or on the job training in.....

.....

2. To give assistance in securing suitable remunerative employment.

3. To make regular.....reports to The State Board for Vocational Education of attendance and progress, special reports of any circumstances or conditions which may indicate that the success and possibility of placement of said Trainee in the specified position may be questionable, and immediate absence reports when Trainee is absent more than three consecutive days.

4. If Trainee is absent for more than three days per month, total days absent shall be deducted from monthly bill. This deduction will be based on fractional part of total instructional days for the month involved. **Except:** In regularly recognized institutions of COLLEGE GRADE, adherence will be made to institutional policies governing payment for services during absences.

5. To follow instructions for submission of accounts and reports as listed on the reverse side.

SECTION III. The State Board for Vocational Education agrees:

1. To pay to the Training Agency when properly claimed, for the above service, an amount not to exceed $..... as follows:

.....

.....

2. To periodically supervise the instruction and training of the Trainee.

SECTION IV. The Trainee agrees:

1. To maintain a grade not lower than "Average" for the required number of hours established in a prescribed course.

2. To perform such duties as are required by the Training Agency and by The State Board for Vocational Education for the period set forth in this contract.

3. To make regular DETAILED reports EACH MONTH until satisfactorily placed in full-time employment.

4. To report to The State Board for Vocational Education immediately upon securing a position, giving name of employer, nature of position, wage and date of starting employment.

SECTION V. IT IS FURTHER UNDERSTOOD AND AGREED:

1. That should service herein contracted for cease before the end of the month or other specified time for which periodical payment is provided, compensation will be made only for actual time during which or for which service is rendered. **Except:** In regularly recognized institutions of COLLEGE GRADE, adherence will be made to institutional written policies governing student withdrawals.

2. That The State Board for Vocational Education reserves the right to withdraw the Trainee at any time if in the opinion of its Agent the Trainee fails to make satisfactory progress or if the Training Agency violates any of the terms of this agreement, or if funds are not available to complete contract, notice will be given to the Training Agency in advance of the withdrawal of Trainee.

APPROVED:

.....
State Supervisor of Vocational Rehabilitation

Date....., 19.....

COLORADO STATE BOARD FOR VOCATIONAL EDUCATION

By.....
Executive Officer

Date....., 19.....

SIGNED:

.....
Name of Training Agency

....
Representative of Training Agency Date

....
Trainee Date

....
Area Supervisor of Vocational Rehabilitation Date

INSTRUCTIONS FOR SUBMISSION OF ACCOUNTS AND REPORTS

Detailed billing and observance of State requirements are essential. The procedure is simple, however; and promptness and care in preparation of accounts in the form indicated will insure prompt payment and mutually satisfactory business relations.

GENERAL

1. At no time may the amount authorized be exceeded or used for purposes other than those set up and agreed upon in writing.
2. Invoices and statements must be itemized showing the type of services rendered, supplies or other items delivered, period covered, and must be SIGNED as received by the TRAINEE. No tax may be included.
3. Bills MUST be submitted in DUPLICATE and mailed to the following address:

STATE BOARD FOR VOCATIONAL EDUCATION
DIVISION OF REHABILITATION

AREA OFFICE

4. Invoices or statements should be submitted for processing and payment as soon as possible after services are rendered or items delivered to Trainee. Preferably not later than the FIRST of the following month.

TUITION

1. Include on bill—name of Trainee, dates and itemized account of tuition.

SUPPLIES

1. Itemize all supplies furnished during the calendar month or portion of month covered by bill and indicate date of issue and Trainee to whom furnished. Bills cannot be approved for payment unless they show these data in detail.
2. Title to all supplies and equipment furnished by State Board to the Trainee shall remain with Trainee as long as such supplies or equipment is used for the purposes for which purchased. Failure to follow this regulation will automatically cause such title to revert to The State Board.
3. All bills for supplies, when authorized, furnished by Training Agency, must be signed by Trainee as well as Training Agency.

Form R-8

TRAINING PROGRESS REPORT

COLORADO VOCATIONAL REHABILITATION SERVICE
210 State Office Building
Denver 2, Colo.

NOTE: This report must accompany any claim for payment of tuition or other charges

Name of trainee_____ Month ending_____, 19____

1. Number of Days Present--(For full-time trainee)_____days.
   Number Hours Instruction Given--(For part-time or tutorial) _____hours.

Check with "X" the word or words best describing Items 2, 3, 4, 5 and 6.

2. Regularity of Attendance--This month:

Time lost.	_____
Occasional absences. . . .	_____
Irregular.	_____
Were absences excusable? Yes__ No__	

3. Status of Trainee--This report:

In training.	_____
In training but ready for job. . .	_____
In employment.	_____
Discontinued	_____

4. Progress This Month:

Accelerated. . .	____
Average	____
Slow	____
No progress. . .	____

5. Quality of Work:

Excellent. . .	____
Good	____
Fair	____
Poor	____

6. Cooperation in Training:

Cooperative	____
Fairly Cooperative	____
Indifferent	____
Not Cooperative . .	____

7. Difficulties (If any check below and explain briefly on back of this form):

(a) With training course:

Learning subject matter	_____
Following instructions	_____
Handling tools or machines	____
Speed	_____
Accuracy	_____

(b) Other difficulties:

With disability	_____
With appliance	_____
With general health	_____
With other (describe)	_____

8. Subjects or Operations This Month--With grades (If in employment training rate performance as Good, Fair or Poor):

Subjects or operations	Grade or rating	Subjects or operations	Grade or rating
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

9. In your judgment, does trainee have the talent, personality, educational and other qualifications necessary to succeed in this kind of work?_____ If not, explain_____

10. Has trainee begun to earn a wage?_____ If so, how much?_____

11. How much more time will trainee require (approximately) to complete training_____

12. Recommendations for improving performance_____

Training Agency_____

(Place)_____ (Address) _____

(Date)_____ (Signed) _____
Officer or Instructor in Charge

Appendix C.--MASTER SHEET

MASTER SHEET
(sheet #1 of 2 sheets)

Case No.	Age at Survey	Sex	Marital Status	No. of Dependents	Grade in school completed	Origin of Disability	Diagnosis of Disability: Visual	Auditory	Cardiac	Tubercu-lous	Ortho-pedic	Diabetic	Miscella-neous	Appliances worn at Survey	Age at time of Disablement	Employment History
1	45	M	M	2	11	Disease					arthritis of hands and knees		✓	Crutches	33	Substantial
2	17	M	S	0	11	Disease					stiff knee		✓	Brace	11	Part-time
3	31	M	M	2	12	Disease					Stomach ulcers & swelling hands			—	22	Substantial
4	44	M	M	2	12	Other accident					both knees stiff			—	41	Substantial
5	37	M	M	2	8	Disease					t.b. of left hip			—	35	Substantial
6	39	M	M	2	15	Disease					multiple arthritis, arms, legs			—	25	Substantial
7	15	M	S	0	8	Congenital					hermaphrodite			—	0	none
8	20	M	S	0	14	Disease					arthritis of feet			—	19	none
9	29	M	M	3	8	Employment accid.					fractured vertebrae			brace	25	Substantial
10	31	M	M	3	10	Other accident					epilepsy			—	28	Part-time
11	41	M	M	3	8	Congenital					dislocated hip			—	0	Part-time
12	18	M	S	0	12	Other accident		50% loss in right ear			limp right side paralysis			—	3	Part-time
13	15	M	S	0	13	Disease					both legs paralyzed			—	9	Part-time
14	18	M	S	0	12	Accident					lost left hand			artificial hand	17	Part-time
15	21	M	M	0	8	Disease					left arm & right leg		paralyzed	—	2	Part-time
16	42	M	M	3	10	Disease					right side partly		paralyzed	speech defect	4	Part-time
17	39	M	M	3	10	Employment Accid. non-compensable					right leg cut off below knee		left leg above knee	artificial legs	29	Substantial
18	57	M	M	4	5	Congenital								—	42	Part-time
19	21	M	S	0	14	Disease		80% loss of hearing						Sonotone aid	21	Part-time
20	17	M	S	0	11	Congenital					wry neck			—	0	Part-time
21	15	M	S	0	12	Congenital					club foot (right)			Special shoe	0	none
22	18	M	S	0	12	Disease								—	15	none
23	30	M	S	0	8	Congenital					cong. amputation of four fingers on each hand and feet affected			—	0	Substantial
24	18	M	S	0	13	Disease								—	17	none
25	19	M	S	0	12	Disease					curvature of spine and prominent left hip			—	17	none
26	43	M	M	6	6	Employ. accid. compensa.					fingers on right hand amputated			—	43	Substantial
27	29	M	S	0	13	Disease					partial deafness			—	20	Substantial
28	32	M	M	3	8	Disease								—	26	Part-time
29	27	M	S	0	12	Disease								—	1	Substantial
30	35	M	M	2	12	Disease					right side partly paralyzed			—	12	Substantial
31	28	M	S	0	15	Congenital					arthritis of legs, back and neck			crutches	0	Part-time
32	21	M	S	0	14	Disease					Fraslich Syndrome			—	17	Substantial
33	16	M	S	0	7	Other accident					systolic murmur			—	4	none
34	44	M	S	0	7	Other accident								Zenith hearing aid	9	Part-time
35	25	M	S	0	13	Congenital					right leg amputated 6" below knee			artificial leg	0	Substantial
36	61	M	M	1	8	Other accident					left arm short and small			—	21	Part-time
37	37	M	M	2	12	Non-compensatory accid.					left leg amputated below knee			artificial leg	35	Substantial
38	38	M	M	2	8	Congenital					spinal injury			—	35	Substantial
39	22	M	S	0	12	Disease					bilateral dislocation of hips			—	5	Part-time
40	32	M	M	2	12	Other accident					muscular ataxia			wasting	21	Part-time
											left leg amputated 12" below knee			—	30	Substantial

MASTER SHEET
(sheet #2 of 2 sheets)

Case No.	Wage at Survey	Vocational training objective	Length of training (months)	Training Agency	Cost of Instruction	Cost of Equipment and Supplies	Physical Restoration	Job or Occupation	Wage at Closure (weekly)	Direct Placement / Indirect Placement
1	$0.00	commercial artist	–	–	–	$74.06	$50.00 Dentures	Self employ.	$12.00	D.P.
2	–	–	–	–	–	–	–	Truck driver	25.00	I.P.
3	–	–	–	–	–	–	–	Painter	35.00	I.P.
4	–	–	–	–	–	–	–	Alteration-ladies shop	30.00	I.P.
5	–	–	–	–	–	–	–	Farm hand	35.00	I.P.
6	25.00	lawyer	3	college	35.00	163.00	5.00 medical exam.	Lawyer	60.00	I.P.
7	–	–	–	–	–	–	–	Sugar beet factory laborer	54.00	I.P.
8	–	teacher	3	college	–	–	5.00 medical exam.	tea room host.	25.00	I.P.
9	–	–	–	–	–	–	–	trailer-truck owner	75.00	I.P.
10	–	–	–	–	–	–	$20.00 for x-rays 5.00 medical exam.	linoleum layer	30.00	I.P.
11	–	–	–	–	–	119.00	5.00 medical exam. 5.00 orthopedic exam.	auto mechanic	35.00	I.P.
12	–	–	–	–	–	–	5.00 medical exam.	auto mechanic	18.00	I.P.
13	20.00	secretary	3	–	42.00	12.00	5.00 medical exam.	book keeper	20.00	I.P.
14	–	–	–	–	–	–	–	teacher	35.00	I.P.
15	–	–	–	–	–	–	5.00 medical exam.	watchman	50.00	I.P.
16	12.00	–	–	–	–	–	5.00 medical exam.	guardman & gardener	20.00	I.P.
17	–	watch repair	12	private trade school	300.00	149.00 (+300.00 for maintenance)	–	watch repair	35.00	I.P.
18	–	dietitian	21	college	267.00	48.00	34.00	farm hand	20.00	I.P.
19	–	–	–	–	–	–	–	dietitian	40.00	I.P.
20	–	–	–	–	–	–	–	ranch hand	30.00	I.P.
21	–	–	–	–	–	–	–	farm hand	20.00	I.P.
22	–	medical tech.	3	college	24.00	–	–	laboratory tester	30.00	I.P.
23	35.00	body and fender	6	business estab.	90.00	17.68	–	body & fender	29.00	D.P.
24	–	secretary	7	business college	40.00	5.00	5.00 medical exam.	stenographer	26.00	I.P.
25	–	beauty operator	9	business establish.	150.00	15.00 - license 29.00 - equipment	–	beautician	25.00	I.P.
26	–	–	–	–	–	–	–	mine mech. oper.	50.00	I.P.
27	–	–	–	–	–	–	–	clerk typist	22.50	I.P.
28	–	–	–	–	–	–	–	dump truck driver	50.00	I.P.
29	15.00	–	–	–	–	4.80	5.00 medical exam.	cement mfg. plant	35.00	I.P.
30	35.00	–	–	–	–	–	–	linotype operator	40.00	I.P.
31	3.00	teacher	2	college	60.50	3.95	5.00 medical exam. (less for 2 basal metabol.)	teacher	45.00	I.P.
32	20.00	–	–	–	–	–	–	farm hand	20.00	I.P.
33	–	–	–	–	–	–	5.00 medical exam.	farm hand	20.00	I.P.
34	–	–	–	–	–	–	–	laborer blacksmith	44.00	I.P.
35	–	–	–	–	–	–	–	lineman U.S. Bureau of Reclamation	35.00	I.P.
36	30.00	–	–	–	–	–	new leg secured through cooperating agency	Yardman	30.00	I.P.
37	–	–	–	–	–	–	$15.00 braces, $3.00 glasses, 5.00 medical, 25.00 x-ray	owner-manager trailer house	50.00	I.P.
38	–	negative retoucher	6	business establish.	–	–	–	negative retouch	25.00	D.P.
39	–	secretary	4	business college	47.00	12.00	5.00 medical exam.	book keeper-clerk	28.00	I.P.
40	–	radiator repair	3	business establish.	75.00	140.00 (+75.00 for maintenance)	125.00 - purchase of leg	radiator repair	60.00	I.P.

B I B L I O G R A P H Y

BIBLIOGRAPHY

1. Association of casualty and surety executives. National conservation bureau. The physically impaired. New York, 1945. 34 p.

2. Baruch committee on physical medicine. Report on a community rehabilitation service and center (functional plan). New York, 1945. 24 p.

3. Bingham, Walter V.D. Aptitudes and aptitude testing. New York, Harper and bros., 1937. 390 p.

4. Blauch, Lloyd E. Federal cooperation in agricultural extension work, vocational education and vocational rehabilitation. Washington, U.S. Govt print. off., 1935. 298 p. (U.S. Office of education. Bulletin, 1933, No 15.)

5. Blauch, Lloyd E. Vocational rehabilitation of the physically disabled. Washington. U.S. Govt print. off. 1938. 101 p. (U.S. Advisory committee on education. Staff study No. 9)

6. Bloomfield, Meyer. Readings in vocational guidance. Boston, Ginn & co., 1915. 723 p.

7. Bobrowitz, I.D. and Newman, Joseph. The rehabilitation program at the municipal sanatorium Otisville, N.Y. New York, National tuberculosis association, 1946. 77 p.

8. Bock, Blanche P. A study in civilian rehabilitation in the state of Iowa. Master's thesis, 1934. Colorado State Teachers College. 122 p. ms.

9. Bridges, Clark D. Job placement of the physically handicapped. New York, McGraw-Hill book co., 1946. 329 p.

10. Burgum, Leland S. From obscurity to security: a historical and statistical analysis of the movement to aid physically handicapped children and disabled adults in North Dakota,

Abstract in: U.S. Office of education. Bibliography of research studies in education, 1937/38:343, 1937.

11. Camus, Jean. Physical and occupational re-education of the maimed. New York, William Wood and co., 1919. 195 p.

12. Colorado. Industrial commission. Workmen's compensation act of Colorado and Colorado occupational disease disability act. Denver, 1945. 106 p.

13. Colorado society for crippled children and adults. Annual (20 Anniversary) report. Denver, 1946. 10 p.

14. Colorado. State board for vocational education. State plan for vocational rehabilitation July 1, 1937 to June 30, 1942; Part II vocational rehabilitation. Denver, 1942. 211 p. (Its Bulletin, No. 1-Third revision)

15. Coslow, Judith. Some factors affecting the adjustment of problem children after placement. Master's thesis. 1939. Smith College. Listed in: U.S. Office of education. Bibliography of research studies in education, 1939/40:332, 1939.

16. Cunningham, Elbert C. Civilian vocational rehabilitation in North Carolina. Master's thesis, 1936. George Peabody College for Teachers. 109 p. ms.

17. Hathway, Marion. The young cripple and his job. Chicago, University of Chicago press, 1928. 130 p. (Social service monograph no. 4)

18. Heise, Leonard. Study of University of Wisconsin graduates aided by vocational rehabilitation fund. Master's thesis, 1938. Wisconsin University. Listed in U.S. Office of education. Bibliography of research studies in education, 1937/38:270, 1938.

19. Hicker, Harry D. and Hart, Frank E. Jr. Personality and personal development and psychology and you. Roanoke, Va., January 1943. 36 p. (Your vocational rehabilitation No. 3)

20. Hocking, Burl A. The nature and effectiveness of the guidance and placement programs of one hundred vocational agriculture teachers in Illinois. Master's thesis, 1939. Colorado State College, Fort Collins. 57 p. ms.

21. Houser, Walter Mussell. Educational rehabilitation of physically handicapped citizens of Colorado. Master's thesis, 1939. University of Colorado. Abstract in: Colorado. University. University of Colorado studies. 26:73-74, 1939.

22. Jones, Leonard. Matching abilities and jobs. Master's thesis, 1940. University of Colorado. Abstract in: Colorado. University. University of Colorado studies. General series, 26:60, 1940.

23. Kessler, Henry H. The crippled and the disabled: rehabilitation of the physically handicapped in the United States. New York, Columbia University Press, 1935. 337 p.

24. Meyers, George. Principles and techniques of vocational guidance. New York, McGraw-Hill book co., 1941. 377 p.

25. National tuberculosis association. Rehabilitation of the tuberculous. New York, 1946. 138 p.

26. Neuschutz, Louise. Jobs for the physically handicapped. New York, Bernard Ackerman, inc., 1944. 240 p.

27. Ohio. Department of education. Board for vocational education. Civilian rehabilitation service. Vocational rehabilitation for physically disabled civilians in Ohio. Columbus, 1926. 81 p. Prepared by Marlow P. Perrin.

28. Patrick, Olney M. The economic value of vocational rehabilitation in Kentucky. Master's thesis, 1938. University of Kentucky. Abstract in: U.S. Office of education. Bibliography of research studies in education, 1937/38:329. 1938.

29. Robinson, Luis. 500 post war jobs for men. Garden City, N.Y., Doubleday, Doran and co., 1945. 285 p.

30. Rogers, Carl R. Counseling and psychotherapy. Boston, Houghton-Mifflin co., 1942. 450 p.

31. Scurlock, Voyle C. Economic aspect of vocational rehabilitation. Master's thesis, 1936. Oklahoma Agriculture and Mechanical College. Abstract in U.S. Office of education, Bibliography of research studies on education. 1935/36:139. 1936.

32. Shaffer, L.F. The psychology of adjustment. Boston, Houghton-Mifflin co., 1936. 600 p.

33. Shortley, Michael J. Why be handicapped. Handicap, 1:6-7, 23. July 1947.

34. U.S. Office of education. Rehabilitation of the deaf and hard of hearing. Washington, 1941. 83 p. Processed. Misc. no. 2535.)

35. U.S. Office of vocational rehabilitation. Comparison of selected case load data for state rehabilitation agencies and agencies for the blind. Washington, U.S. Gov't print. off., 1947. 5 p. (Rehabilitation series no. 21, March 1947)

36. U.S. Office of vocational rehabilitation. Efficiency of the impaired worker. Washington, U.S. Gov't print. off., 1946. 12 p. (Rehabilitation services series no. 1.)

37. U.S. Office of vocational rehabilitation. Medical information for vocational rehabilitation officers. Washington, U.S. Gov't print. off., 1943. 88 p. (Vocational rehabilitation series bulletin no. 27.)

38. U.S. Office of vocational rehabilitation. Opportunities for the deaf and hard of hearing. Washington, U.S. Gov't print. off., 1946. 12p.

39. U.S. Office of vocational rehabilitation. Physical rehabilitation of the amputee. Washington, U.S. Gov't print. off., 1947. 17 p. (Rehabilitation standards, memorandum no. 6.)

40. U.S. Office of vocational rehabilitation. Regulations governing the plans and programs of vocational rehabilitation pursuant to public law 113, 78th Congress, 1st. session -- approved. July 6, 1943. Washington, U.S. Gov't print. off., 1943. 24 p. Code of federal regulations title 45, public welfare chapt. 6.

41. U.S. Office of vocational rehabilitation. Staff development programs. Washington, U.S. Gov't print. off., October, 1946. 10 p. (Rehabilitation services series no. 9.)

42. U.S. Office of vocational rehabilitation. Vocational rehabilitation for civilians. Washington, U.S. Gov't print. off., 1946. 21 p.

43. U.S. War manpower commission. Guide for analyzing jobs, analytical workbook. Washington, U.S. Gov't print. off., 1944. 40 p.

44. U.S. War manpower commission. Physical demands analysis and physical capacities appraisal. Washington, U.S. Gov't print. off., 1945. 37 p. Reprint with changes.

45. U.S. War manpower commission. Selective placement for the handicapped. Washington, U.S. Gov't print. off., 1945. 206 p.

46. U.S. War manpower commission. Selective placement of disabled veterans and other handicapped. Washington, 1945. 146 p. Minutes of Ann Arbor conference on selective placement, May 28 through June 1, 1945.

47. U.S. War manpower commission. Training and reference manual for job analysis. Washington, U.S. Gov't print. off., June 1944. 104 p.

48. Williamson, E.G. How to counsel students. New York, McGraw-Hill book co., 1939. 562 p.

49. Yost, Edna. Normal lives for the disabled. New York, Macmillan co., 1944. 298 p.