

SEPTEMBER, 1953

The journal of the Limb and Brace profession

Orthopedic

and

Prosthetic

Appliance

Journal

National Assembly

Compensation Cases – Rehabilitation

German Brace & Limb Shops

published jointly by

Orthopedic Appliance & Limb Mfrs. Association

American Board for Certification

DATES TO REMEMBER — 1953

What • When • Where

OCTOBER

- | | | |
|-------|--|---------------------------------------|
| 1 | FINAL SESSION, NATIONAL ASSEMBLY OF THE LIMB AND BRACE PROFESSION | <i>Drake Hotel,
Chicago, Ill.</i> |
| 1 | TRADE PRACTICE CONFERENCE FOR THE CUSTOM-MADE ORTHOPEDIC APPLIANCE INDUSTRY | <i>Drake Hotel,
Chicago, Ill.</i> |
| 2-3 | Meeting of the LOWER EXTREMITY and UPPER EXTREMITY Technical Committees (Advisory Committee on Artificial Limbs, National Research Council). | <i>Drake Hotel,
Chicago, Ill.</i> |
| 19 | UCLA PROSTHETICS SCHOOL—6th Section Opens (concludes November 27, 1953). | <i>Los Angeles, Calif.</i> |
| 25-28 | ANNUAL CONFERENCE OF THE NATIONAL REHABILITATION ASSOCIATION | <i>Miami Beach, Fla.</i> |

WELCOME TO NEW MEMBERS OF OALMA!

Cordial greetings are extended to these new members of OALMA:

Akron Orthopedic Brace Mfg. Company, B. J. Crowley, Owner, 280 Locust Street, Akron 2, Ohio.

Baker Artificial Limb & Brace Company, J. A. Baker, Owner, 709 West 10th Street, Fort Worth, Texas.

W. F. Francis Company, W. F. Francis, President, 376 Broad Street, Newark, New Jersey.

Horn Surgical Company, William H. Horn, 3rd, President, 617-631 N. 53rd Street, Philadelphia 31, Penna.

Indiana Brace Shop, T. M. Davidson and M. E. Miller, Partners, 72 West New York Street, Indianapolis, Indiana.

Lima Brace & Limb Company, George Rinck, Owner, 315 North Elizabeth Street, Lima, Ohio.

Nash Surgical Company, Alexander E. Nash, President, 307 Fairfield Avenue, Bridgeport, Connecticut.

Jack Schwarz Orthopedic Appliances, Jack Schwarz, Owner, 1445 Third Avenue, New York 28, New York.

Social Surgical Appliance Company, Seymour L. Kerner, Partner, 838 Broadway, New York 3, New York.

A. H. Starkey Artificial Limb Company, A. H. Starkey, Owner, 32-36 Elm Street, Hartford 14, Connecticut.

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(Founded in 1946 as The Journal of OALMA)

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NUMBER 3

<i>Article</i>	<i>Page</i>
NATIONAL ASSEMBLY CONVENES AT CHICAGO.....	3
THE ROLE OF PROSTHETICS IN REHABILITATION.....	7
<i>Robert Mazet, Jr., M.D., Chief of the Orthopedic Service, Veterans Administration Center at Los Angeles.</i>	
EFFECTIVE REHABILITATION OF COMPENSATION CASES.....	10
<i>Joseph C. Aveni, Member, National Advisory Council to Certification Board; Director of the Liberty Mutual Rehabilitation Center, Boston.</i>	
GERMAN BRACE AND LIMB SHOPS: OALMA MEMBER REVISITS GERMANY.....	44
<i>Laurence Porten, President, Union Artificial Limb Company.</i>	
WESTERN SCHOOL UNDERWAY.....	49
<i>C. O. Anderson, President, Prosthetic Services of San Francisco.</i>	
WALTER R. SIEVERS: AN APPRECIATION.....	50
<i>David E. Stolpe, Director, Region II of OALMA; Consultant on Examinations to the American Board for Certification</i>	
WALK-AID RAILINGS.....	52
<i>Paul E. Leimkuehler, Director, Region V of OALMA; President, The Leimkuehler Limb Co.</i>	
<i>Departments</i>	
TO YOU: FROM THE PRESIDENT OF OALMA.....	2
TO THE LADIES: FROM OALMA WOMAN'S AUXILIARY.....	4
WHY CERTIFICATION—A MESSAGE FROM PRESIDENT MCKEEVER.....	5
SUPPLIERS SECTION	15
REVIEWS	54
IN MEMORIAM	56

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SUBSCRIPTIONS

The Journal is sent to all certified fit-
ters and to members of the Association.
A special subscription rate of \$4.00 a
year is available to (1) Physicians (2)
Fitters who are not certified (3) Societies
and Government Agencies, and (4) Per-
sons and firms which are not eligible for
membership in the Association.

Reprints of articles in this issue will be
available at reasonable cost.

To: YOU

From: THE PRESIDENT OF OALMA

Once again it is National Assembly time. It is a time when we can evaluate our outstanding achievements of the year, and make plans for the



Lee J. Fawver

future. This is your association and your attendance and participation in the Assembly helps to strengthen and promote a progressive OALMA. This year's program is going to be a "natural" for our industry. The theme is *Professional Trends for Prosthetists and Orthotists*. Howard Thranhardt, our program chairman, has done an outstanding job of securing speakers whose subjects bear vitally on this theme. For the four seminars, he has picked teachers who are experts in their field.

You will have the best opportunity of the whole year to establish con-

tacts with those who sell material and supplies, as the supply firms have engaged booths to effectively display their products. Their representatives will welcome you.

Another important event is the annual meeting of the American Board for Certification, with emphasis on the professionalization of our vocation.

Good fellowship and social activities are planned for your pleasure by the entertainment committee. Everyone will have a chance to greet old friends and make new ones.

So it all adds up to *time well spent* when you attend the Assembly in Chicago at the Drake Hotel September 27 to October 1. We'll be seeing you!

A handwritten signature in cursive script that reads "Lee J. Fawver". The signature is written in dark ink on a light background.

"What's New(s)"

- DAVID E. STOLPE, New York City, was chairman of the special all-industry committee which drew up the suggested trade practice rules for the Custom-Made Orthopedic Appliance Industry. These are to be the basis for the Trade Practice Conference which the Federal Trade Commission is holding in Chicago, October 1. Other members of the committee were: Karl W. Buschenfeldt of Stoughton, Mass., W. Frank Harmon of Atlanta, Georgia, and Charles C. Cullen of Seattle, Washington.

- BERT R. TITUS sends word that Region IV of OALMA will meet at

Duke University, Durham, N. C., in March of next year. Every reader of the *Journal* is cordially invited to attend. Details of the program will be announced in the December issue.

- WILLIAM J. FERRIS, JR., Director of OALMA Region No. I, reports that the New England Regional Council is planning a two-day symposium to be held at Boston, March 26-27, to which all members of the brace and artificial limb profession are invited. At its June meeting, the Council presented commemorative gavels to past presidents Joseph C. Aveni and Frank Washburn. The program also featured a Symposium on Cineplasty, presented by the staff of the Hasbrouck Heights, N. J., Hospital.

NATIONAL ASSEMBLY CONVENES

Hawley and Mason Headline Assembly Program for Limb and Brace Profession

"It's going to be *both* bigger and better than ever before" happily declared program Chairman Howard Thranhardt as he went over last-minute preparations for the 1953 Assembly. Top management men, skilled fitters and surgeons will gather at the Drake Hotel in Chicago September 27 for the five-day sessions of OALMA and the Certification Board.

Howard has good reason to be satisfied with the line-up for the Assembly. For example:

Outstanding Speakers

LOWELL B. MASON, Federal Trade Commissioner, and noted crusader for common sense in business laws, is the key-noter for OALMA's annual banquet, September 30. He is also to preside at the Trade Practice Conference for "The Custom-Made Orthopedic Appliance Industry," which is scheduled on October 1 as a post-Assembly event.

Mason, a highly successful lawyer, was general counsel to the Clarence Darrow Board which studied the National Recovery Act. Named to the Federal Trade Commission by President Truman, he established himself there as "The Great Dissenter" but has since then won over a majority of the Commission to his strong conception of the American Free Enterprise System.

GENERAL PAUL R. HAWLEY, another topnotch speaker, is to address the annual luncheon of the American Board for Certification on September 29. His topic "The First Five Years Are Not the Hardest" indicates his deep interest in our *Certification Program*. After a distinguished career in the Army and as Chief Medical Officer for the Veterans Administration, he became Director of the American College of Surgeons.



Lowell T. Mason



Sidney Fishman

Sharing honors with Mason and Hawley, are over forty of our own technicians and leaders joining with such experts from research and education as General Fred S. Strong, Jr., Colonel Maurice J. Fletcher, Dr. Miles H. Anderson and Dr. Sidney Fishman.

Clinics—Demonstrations—Panels

Technical problems of helping the handicapped are explored in a series of clinics and demonstrations, getting underway Tuesday morning with the session on *Low Back Braces* and the *Upper Extremity Prosthetics*. "What Would You Do?" is stressed again and again as *Rehabilitation*, *Certification* and *Management* issues take the spot-light.

Refresher Courses

The Drake Hotel takes on a classroom look Sunday as four seminars get underway. Begun last year as an innovation, these refresher courses were the hit of the Assembly and are expanded for this year's delegates. *Entertainment Too:*

Summing it all up—it's a well-rounded program of education, recreation, and professional advancement, designed to help you meet the issues of today and the opportunities of tomorrow.



TO THE LADIES:

from OALMA's Woman's Auxiliary

Convention time is nearing and we are looking forward to seeing all our friends and making new acquaintances. It's wonderful to be one big family—to share the same ideas.

Girls, don't forget to pack your bags and come along too. We are planning an interesting and varied program which you will enjoy. You are assured of a good time Sunday evening with Charley Bennington in charge as the name "Bennington" is synonymous with an evening of fun. We have attempted to plan a program that will appeal to all of us.

Open your hearts and minds and you'll be in for a good time as well as getting some educational values too. Many of us are prone to close our minds to anything new and are content to continue to do things as we always have. How easy this road is and, yet, when we finally awaken, we see that the world has stepped ahead into a bright new horizon. How true the words are that Benjamin Franklin spoke, "A man wrapped up in himself makes a very small bundle". Continuous research and discussing our problems with our fellow members insures progress in our field.

Let's be glad that we have the opportunities and freedoms that are available in our great land. People in other lands are not so fortunate—they are fearful and starving—opportunity is just not theirs to enjoy. Think of our convention and our organization as we think of our country—a democracy—by the people, for the people, of the people—of our industry. Certainly we do not always agree—that is our privilege—one of our freedoms. To build a great organization needs the help of all, not just a few to keep things going.

Let's boost our organization and further our cause, thereby gaining greater vision for our entire industry. To be a partner in this great humanitarian work of aiding the physically handicapped is a rare privilege, so let us not take it for granted—Be a Booster for OALMA and our Auxiliary.

I'll be seeing you in Chicago soon.

Sincerely,

A handwritten signature in cursive script that reads "Betty Hanicke". The signature is written in dark ink on a light background.

BETTY HANICKE

WHY CERTIFICATION?

A Message from the President of the American Board for Certification

Why Certification?

I know you've been asked that question just as I have been by many people who are in or deal with our profession.



D. A. McKeever

That question is being answered every day in actual happenings.

Why Certification for a Fitter?

There were 46 candidates at the Atlanta examination. One man came with 32 years' experience.

He believed, and so did the others, that Certification is a recognition that a qualified fitter needs.

Why Certification for the Establishment?

All of us know of an establishment that has added fitting rooms, cleaned house and generally improved their establishment in order to meet the

high standards required by the American Board of Certification. This firm believed, and so do all establishments, that Certification means the BEST.

Why Should Institutions Use Only Certified Facilities?

A Southern State has directed its institutional business to go only to Certified firms (and they say the South is backward and slow?). This State believes that it can be assured proper service for its handicapped only by dealing with accredited firms.

Why Should the Doctor Use Only Certified Fitters?

One of our leading Orthopedic Surgeons recently told a young man anxious to handle his cases, "First get Certified". This Surgeon believes that if he deals only with Certified fitters he is assured, at the least, of a definite recognized level of knowledge, ability, experience and ethics.

Why Certification? — Believe me the time is here to say **WHY NOT?**



The Prosthetist: A Description

From the firm of McCALL-RISING, INC., comes an attractive folder. We like it so much we are quoting it here; members of OALMA wishing to make use of it should write William C. McCall at 1732 Central Avenue, St. Petersburg, Florida.

"The specialist in prosthesis spends years in his work before he becomes sufficiently skilled to fit limbs. He knows how to protect a stump, bathe, exercise, reduce it. He knows the endless variations of the human build, its proportions, balance, weights and supports. His theoretical knowledge of anatomy finds practical application in correct alignment of the limb. He knows where weight may be carried

and how to avoid discomfort. He must fit around bony projections and protect blood vessels and nerves from injury. He must correct sagging hip, dragging toe and weaving shoulder. He must apply mechanical skill to many materials having widely different properties to devise an individual appliance to furnish both support and propulsion. And with his theoretical knowledge he must combine judgment, patience, and an encouraging spirit of helpfulness.

"The man who comes to you from this company has our unreserved endorsement, for we believe that he can help you **rest, work, and walk well.**"

STUMP AND SOCKET

A New Fifteen Points by "Garosy"

Fifteen points (pressure points) born out of observations of a compassionate student of the Suction Socket Prosthesis.

1. He who fits every stump with a Suction Socket and is no magician, must fit none. He has yet to learn the elementaries of this product.
2. The stump must grip the socket. Never must the socket grip the stump—it's a strangler's grip.
3. It's the muscle that makes the suction socket go; it will do without suction, but never without muscle.
4. The Fitting of the Suction Socket is the determinant in the survival of the fittest fitters.
5. Mutual disregard between the prosthetist and the surgeon is alone not sufficient to secure an ideal product.
6. The fit of the socket — the fate of the stump.
7. Seventy-five percent of the stump is water. The shape of the stump changes during walking, the socket does not.
8. Hip contractures are real. To recognize and regard them is the acid test for mastery.
9. Gait Rhythm means better mental rhythm.
10. The (correct) Silesian Bandage, the adductor belt, is the best friend a weak stump ever had.
11. What's in a name? The *Silesian Bandage* is no bandage, the *Ischial Seat* is not to sit on, and the *Suction Socket* can do without suction.
12. An optimist's way of dealing with stump edema: To salute its appearance and call it muscular hypertrophy.
13. With alignment you can't go wrong. Any way you align, there is an authority to back you up.
14. Which one of the two, the doctor or the prosthetist, is to decide on the acceptance of the final product? Answer: The Stump.
15. Phantom Limbs. Stumps are dreamers. Their dreams give them back their lost limbs. In their waking hours it is up to the fitter to make their dreams come true or turn to a nightmare.

"GAROSY"

"What's New(s)"

- AMSTERDAM BROTHERS have a new location at No. 600 E. Genesee Street, in Syracuse, N. Y., for the sale of hospital and medical supplies. They are also using an airplane for fast service to an expanded territory as far north as the Canadian border.
- W. H. MAHNKE of the Zenith Limb Company at Duluth, Minnesota, has devoted over fifty years to the making of artificial limbs, and sends along photograph and newspaper story, testifying that he is still going strong. Must be the Minnesota air! Can any

other *Journal* reader match this long record of service?

- ALFONS R. GLAUBITZ of Elizabethtown, Pa., was a panel member at the Workshop for Therapists held by the Pennsylvania Society for Crippled Children at Harrisburg.

- TRUFORM ANATOMICAL SUPPORTS is continuing its classes in surgical appliance fitting. The schedule for the balance of the year is: October 12 to 16 at Raleigh, North Carolina; October 19 to 23 at New York City, and November 2 to 14 at Cincinnati, Ohio. A Special Women's class will also meet at Cincinnati from November 2 to 7.

The Role of Prosthetics In Rehabilitation

by **ROBERT MAZET, JR., M.D.**

Chief of the Orthopedic Service, Veterans Administration Center,
Los Angeles, California

Dorland's medical dictionary states that prosthetics is "a branch of surgery pertaining to artificial organs or parts".

This is a most inadequate definition, which I propose to revise. The only inference one can draw from this antiquated interpretation of the word prosthetics is that it must be a prosaic, uninspired, rather insignificant, and practically moribund appendage to a decadent and forlorn branch of medicine. It conjurs up images of gnome-like figures laboring in cold, unlighted, airless cellars, conversing by monosyllables in monotonous, pursuing their grim tasks with neither purpose nor pleasure.

In actuality the bracemaker of the ancients was probably the castoff armorer, who, incapacitated for field service with his master, was forced to eke out his living as best he might, and who tried his hand at primitive brace and leg making to aid some of his crippled former brothers in arms, and his disease deformed fellow villagers.

Soon, however, a handful of ingenious individuals, more thoughtful and inventive than most, discovered by trial and error that certain definitive principles of construction and adaptation, or fitting, resulted in the fabrication of products more salubrious for their clients. They became aware also that much satisfaction could be derived from work well done, and work providing succor to the crippled. They learned that each patient presented an individual problem to whom general principles could be applied.

You, who are heirs to an ancient and honorable craft, are fully aware of the slow, sometimes faltering, progress toward the production of more suitable appliances for the

needy. You well know that traditions of good workmanship have been handed down from father to son in many shops. This may have been accompanied by the careful guarding of certain details of construction or fabrication in some instances. Such, however, was the custom in all the arts and crafts until very recently in man's history.

Within the past fifty years, surely within the memory of your fathers, the entire social structure of civilization has undergone profound changes. Scientific and technical advances in every field affect us all. The automobile, the telephone, electric lights, new and better foods, the discovery of metal alloys, plastics, penicillin, and deficit spending have rechanneled the daily activities of every citizen.

The additions to our knowledge in every field have given rise to the specialist within each field. Manufacture of many things has necessitated the formation of large organizations. Correlation of the results of

ROBERT MAZET, JR., M.D.

The Academy of Orthopaedic Surgeons has picked Dr. Mazet as its Nominee for Director of the American Board for Certification. His name will be presented at the National Assembly in Chicago this month. A graduate in medicine of Columbia University, Dr. Mazet is Chief of the Orthopedic Service of the VA Center in Los Angeles. He was elected a Fellow of the American College of Surgeons in 1942.

investigation, production, and distribution requires teamwork. No longer is it possible for an individual to master all the knowledge and techniques in his chosen vocation, and teamwork demands the pooling of knowledge and effort. The self sufficient man is an anachronism.

Research is the key to future living. Even here the day of the single investigator, working moodily in gloomy solitude, has passed. Research is now conducted by teams of workers.

By these tokens one must realize that the artisan, who by his magic skill fabricates brace or prosthesis, cannot himself render a *complete service* to the crippled individual. Nor can he anticipate the acquisition of any particular bit of knowledge which will set him above his contemporaries to his selfish advantage. Firstly, he is in no position to undertake the necessary research; secondly, should he stumble on a worldshaking new technique, if he does not share it, he will be criticized by his jealous associates, who will immediately become his rivals and detractors.

Teamwork in Research

It has long been apparent that better, more functional prostheses were needed. No individual prosthetic manufacturer possessed the time, facilities, or finances to embark on an investigative program of the magnitude necessary to produce the desired improved devices. With the entrance of this country into World War II, the government became engaged in financing research by teams of investigators in many fields. The National Research Council formed an Advisory Committee on Artificial Limbs, which immediately initiated research in the prosthetic field. The medical departments of the Army and Navy lent their support to the research in prosthetic devices.

The Orthopedic Appliance and Limb Manufacturers Association endorsed, and cooperated with the work assigned to diverse laboratories, engineering firms, and manufacturers. Amputation centers were established by the Services for the treatment and rehabilitation of the amputee.

In these centers the necessity for teamwork was again demonstrated. The surgeon produced the best stump he could devise. The physiotherapist and corrective therapist undertook bodily conditioning of the patient. The prosthetist provided an artificial appendage. The amputee trainer instructed the amputee in its use. The psychiatrist guided the patient in the mental adjustment necessary for his acceptance of his handicap. The job counsellor directed efforts toward self support. The patient was the hub of the wheel of activity.

It is not necessary to review in detail here the progress in amputee rehabilitation which has taken place during the last ten years. Neither the surgeon, the physical reconditioner, the prosthetist, nor the employment representative can accomplish the task alone.

Cooperation of research groups, engineers, surgeons, limb manufacturers, psychologists and psychiatrists, under the program instituted by the Advisory Committee on Artificial Limbs and the Veterans Administration has given us a practical suction socket for above knee amputees. We are now becoming familiar with the fabrication and fitting of the various components of lighter, more comfortable, more functional, and longer lasting artificial arms. These have been developed by the combined efforts of a number of agencies, primarily the Northrop Aircraft Co., the Army Prosthetic Research Laboratory, and the Engineering Department of the University of California, Los Angeles.

Many other subjects pertaining to prosthetics are now under investigation. A few are the hydraulic knee joint, the automatic correlation of knee flexion with dorsiflexion of the foot, the application of the suction socket to below knee wearers, improved activating and control mechanism for both upper and lower extremity prostheses. The surgical techniques, and the application of our newer knowledge of upper extremity prosthetics are being reviewed to better evaluate the usefulness of cineplastic motor tunnels.

The dingy shop, tucked away in an undesirable basement, has moved upstairs into a clean, light, well equipped laboratory for the fabrication of improved mechanical aids for the crippled. The work of the craftsman is based on fundamental research in metallurgy and engineering. The results of this are incorporated in the mechanical devices at his command. The product of the research and workmanship of other

members of the prosthetic team provides him with better techniques, and materials, and a more suitable subject. They help in the training of the subject in the use of the artificial appendage which his artistry builds and in the patient's adjustment to the loss of an extremity. *The prosthetist is a member of a team.*

It is clear that prosthetics is the concern of an integrated group of artisans working toward a common goal, the rehabilitation of the amputee. No single member of this team can achieve this alone. Indeed prosthetics is the rehabilitation of the amputee.

In conclusion, I should like to propose that prosthetics be defined as the art of rehabilitation of an amputee; it being the summation of the efforts of the patient, surgeon, limb manufacturer, physiatrist, psychiatrist, amputee trainer, and employment counsellor to fully integrate the amputee into productive society.

"What's New(s)"

• FRED R. NORTON was married May 3 to Miss Marjorie Rose Waddle at Hope, Arkansas. Mr. Norton is a member of the National Advisory Council to the Certification Board, from District 28 (Oklahoma and North Texas). He is associated with his father in the operations of the Larkotex Company at Texarkana, Texas.

• CLINTON L. COMPERE, M.D., Vice President of the Certification Board, was a guest of honor at the meeting in Chicago May 28 of artificial limb and brace shops. Dr. Compere is Senior Consultant to the Veterans Administration in Chicago. With his brother, Dr. Edward L. Compere and Dr. Sam W. Banks, he is co-author of the "Pictorial Handbook of Fracture Treatment," 3rd edition, published at Chicago by Yearbook Publishers, Inc.

• HARTWELL BREMER, brother of Wilmore Bremer, is operating a brace shop at Mexico City. He was a recent visitor to the Bremer Brace Mfg. Co. at Jacksonville, Florida.

• GLENN E. JACKSON, Executive Director of OALMA has been named the American member of an *International Committee on Prostheses, Braces and Technical Aids*. The committee has been established by the International Society for the Welfare of Cripples. It will work for the development exchange of information about care of the handicapped in various countries. Dr. Sven Kaier, Chief Surgeon of the Orthopedic Hospital in Copenhagen, Denmark, is chairman. Other members are Karl Montan, of the Swedish Society for the Crippled, and Dr. J. Craft of the British Ministry of Pensions.

The Effective Rehabilitation of Compensation Cases—And Its Values

by JOSEPH C. AVENI

Member, National Advisory Council to the Certification Board;
Director of the Rehabilitation Center, Boston, Mass.

The word *Rehabilitation* has assumed so many definitions that today any project from finding a new home to the actual physical restoration of the disabled is termed Rehabilitation. It is with the latter, that is, physical restoration, that you as the professionals furnishing the appliances, and we, as the rehabilitation advocates, are concerned.

Forty years ago the first compensation law was passed providing injured employees with a certain measure of security. Over the past forty years, compensation laws have changed radically. They have been enlarged to the point that today twenty-one of our national compensation laws provide weekly benefits for as long as the worker is disabled.

In 1951 there were 46,401,000 individuals (exclusive of agricultural, but including state fund and self insured) who were covered by Workmen's Compensation Laws. In 1951 there were approximately 6,000,000 Workmen's Compensation accidents reported. 25% or 1,500,000 of these accidents were of a disabling nature, or to put it in another way, one worker out of thirty suffered a disabling injury.

A breakdown of these disabling injuries is given in Table I, page 11.

Private carriers write approximately 80% of the countrywide coverage. Liberty Mutual writes approximately 10% of the private carriers' total, or 8% of the countrywide coverage.

* Delivered at the National Assembly of the Limb and Brace Profession, OALMA, Washington, D. C., October 15, 1952.

Therefore, our data times 12 approximates the 6,000,000 Workmen's Compensation accidents reported in 1951.

Liberty Mutual's share of accidents and costs is shown in Table II, page 11.

Is it any wonder then, that insurance companies gave some serious thought to how those concerned might be benefited? It was quite apparent that there must be a new "approach."

This new "approach" had its inception in the minds of S. Bruce Black, the President of Liberty Mutual Insurance Company and Stanwood L. Hanson, Assistant Vice President of the Claims Department.

An immediate survey was made to determine wherein lay the fault. The results were quite obvious. In the majority of cases the seriously injured worker was receiving the best that medical skills could provide in diagnosis and surgery, and the best that hospitals could provide in medical care. It was therefore evident that these seriously injured workers were in need of further treatment.

Many man hours and thousands of dollars were expended in an effort to determine where such treatment and just what type of treatment could be obtained.

It was concluded that if we were to supply this additional treatment, we must undertake a project of our own. As a result, we opened our first Rehabilitation Center in Boston in June of 1943 and our second Center in

TABLE I**Disabling Accidents in 1951 (Workmen's Compensation Cases)**

	12,000 Deaths
(Loss of two limbs or paraplegia	2,000 Permanent total disabilities
(Seriously affected function — arm or leg — Spinal fusion)	22,000 Major permanent partial disabilities
(Not seriously affecting function, loss of toe, finger, bad fracture)	53,000 Minor permanent partial disabilities
(No residual loss of function)	1,411,000 Temporary total disabilities
Total	1,500,000

TABLE II**Liberty Mutual's Share of Accidents and Costs in 1951**

514,084 accidents reported

The Indemnity losses were.....	\$ 38,708,636
The Medical losses were	18,853,397
For a total of	\$ 57,562,033
The approximate cost of the 6,000,000 Workmen's Compensation accidents was: For Indemnity payments....	\$450,000,000
and for Medical payments.....	210,000,000
Total	\$660,000,000

Chicago in January, 1951. We engaged the services of eminent orthopedic surgeons to act as medical directors for our Centers. Under their guidance and prescription, we incorporated the services of Physical and Occupational Therapy at both Centers to treat any Liberty insured worker upon referral by the attending physician.

Within a short time it became evident that amputees and paraplegics were in need of a specialized program over and above anything that had been conceived to that date.

Allow me to illustrate the need for a specialized program by giving you the statistics of one of our hundreds

of amputee cases which have undergone this specialized treatment program: Mr. X, age 36, who sustained third degree burns of the back of his head, right shoulder and both arms when he came in contact with 7200 volts. It was necessary to amputate both arms approximately three inches below the elbows. A large portion of the deltoid muscle of the right shoulder was also destroyed. Long hospitalization and immobilization during the healing period resulted in limitation of motion in the right shoulder and both elbow joints.

Upon his referral to the Boston Center, he was given a complete physical examination. This was followed



One Section of the Rehabilitation Center. The bilateral L/E Amputee is having "an ambulatory fault" checked by the physiotherapist. In the background, newly-arrived amputees hear a discussion of prosthetics.

by complete evaluation of the muscle power and joint motions of the affected parts. Intensive physical therapy was instituted and within a short time, he was adjudged ready to be fitted to prosthetic devices.

Over one hundred man-hours were necessary to adjust and fit the prostheses to the stumps before he was capable of approximating the distal-end appliances to all parts of the body. Twelve weeks later he was discharged from the Center completely independent even to driving an automobile equipped with standard controls.

Under the law covering his injury, he will be paid compensation amounting to approximately \$20,000. There was no provision in the state law for the carrier (i.e. the insurance company) to provide prostheses. The medical bills on this case amounted to \$2,836.00.

We anticipate subsequent payments of \$500 to cover possible contingencies in the future. Repairs and replacements of the prostheses were estimated to be \$750.

The cost of rehabilitation was \$1,891. The total cost was \$2,641.

TABLE III

Rehabilitation Costs for 26 Paraplegia Cases

Total estimated compensation cost if not rehabilitated.....	\$ 526,813	
Total compensation cost with rehabilitation.....	—495,613	
<hr/>		
Total estimated saving in compensation cost by rehabilitation.....	\$ 41,200	
<hr/>		
Total estimated medical cost if not rehabilitated.....	\$2,188,800	
Total medical cost with rehabilitation.....	—784,000	
<hr/>		
Total estimated saving in medical cost by rehabilitation....	\$1,404,800	
Total estimated medical and compensation costs:.....	\$2,188,800 (M)	
	+536,813 (C)	
<hr/>		
If not rehabilitated.....	\$2,725,613	
Medical and compensation costs with rehabilitation:.....	\$ 784,000 (M)	
	495,613 (C)	
<hr/>		
Total of the estimated medical and compensation costs if not rehabilitated.....	\$2,725,613	
Total medical and compensation costs with rehabilitation....	—1,297,613	
<hr/>		
Gross saving.....	\$1,446,000	
The gross savings.....	\$1,446,000	
The cost of rehabilitation.....	—223,089	
<hr/>		
Net saving on just 26 paraplegia cases.....	\$1,222,911	

We estimated that without rehabilitation, it would have been necessary to provide him with attendant care during his lifetime at an estimated cost of \$30,800. Thus, \$30,800 less rehabilitation cost (\$2,641) equals \$28,159, the estimated savings through rehabilitation. Of greater importance, he returned to work as a line foreman seven months and one week following his injury.

About 2300 cases have been admitted to the Boston Center. The average length of stay at the Center is 42 treatment days. The average cost including room and board for these 2300 cases is \$480.00. 67% of those who completed treatment have returned to work.

A study of 200 amputees admitted to the Center shows that all of them are wearing their prostheses and 74%

have returned to actual jobs. Twelve of these amputees lost two limbs; eight of these twelve bilateral amputees are working and earning their living. Two have retired (over 65) and two failed to return to work.

Lest the orthopedic appliance profession feel this discussion is primarily that of amputee problems, I should like to point out a few pertinent facts: Many of our cases come to us with brace supports or are in need of some supportive measure. Many times the problem is a simple one but there are those cases who are wholly dependent upon the use of orthopedic appliances to ambulate or go about the task of daily living.

At the present time, we have 59 open paraplegia cases on which we are carrying a reserve of almost \$3,000,000. We have undertaken active

rehabilitation on 38 of these cases. Rehabilitation has been completed on 26 cases. Of that number, 17 or 65% have returned to work or are in business for themselves.

A statistical study of of the 26 cases rehabilitated is shown in Table III, page 13.

All of the aforementioned has only served to bring me to that point of this discussion which influences us: Namely, of what interest is this to the Orthopedic Appliance and Limb Manufacturers profession.

As you all know, we do not have a commodity or product to sell. The insurance business is the sale of service. Our success can be measured in the terms of Service. Our policyholders demand service, and, in turn, the employee who works for our policyholder is entitled to that service.

Our policyholders are anxious to have these seriously injured workers returned to employment as quickly as possible because the longer they are out of work and collecting compensation, the more their experience rating is affected. Increased experience rating means increased cost of insurance.

The employee, in most cases, is anxious to return to work because he has a family to support and needs to get back to his normal income.

The insurance carrier is most anxious that the seriously injured worker be re-employed since, the longer he is out of work and requires medical attention, the more money it is going to cost. The only means we have to meet our obligations is provide SERVICE.

We have no hesitation in paying for the services that are required to do the job.

We do, however, believe, as the old army saying goes, that we are entitled to a "fair shake." All in all, those cases requiring orthopedic appliances

or artificial limbs are dependent upon quick and efficient service at a fair cost for that service.

Just as in any other business, we seek to cooperate with concerns or individuals best qualified to render these services. Other professions have governing bodies to pass on the qualifications of hospitals, nurses, doctors, therapists, etc. It is through the standards that they have set, that, we, as individuals and companies, are assured a measure of protection. Qualifications based upon the standards of the governing bodies establish public confidence.

In my opinion, the greatest advancement in this field was instituted with the advent of Certification. Our American Board for Certification has promoted us from the ranks of mechanics to the position of professionals. As such we must conduct ourselves in a manner best suited to that title.

For the benefit of all concerned, you should know that the medical profession, insurance companies, state and federal agencies and private individuals are rapidly becoming aware of what "the Mark of Merit" means to them. It is rapidly becoming the consensus of opinion that one should deal only with certified firms and fitters.

Furthermore, I predict that, within five years, those concerns and individuals not certified will find themselves in the position of lacking the necessary qualifications to compete in this profession.

In conclusion, let me remind you that we as an insurance company are willing to pay for service. Time means money to the patient, the employer, to you and to us.

We sincerely solicit your cooperation in expediting the services of your profession to those who make your profession necessary.

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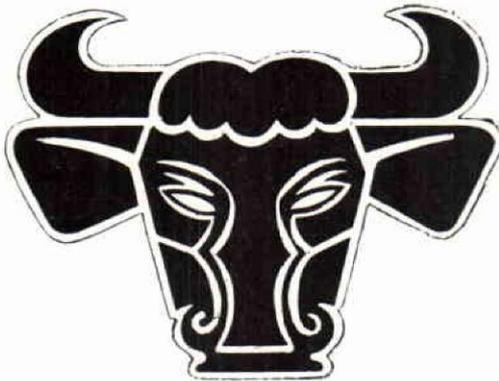
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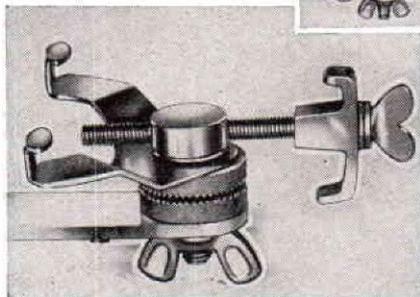
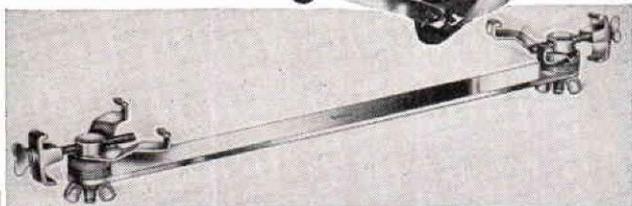
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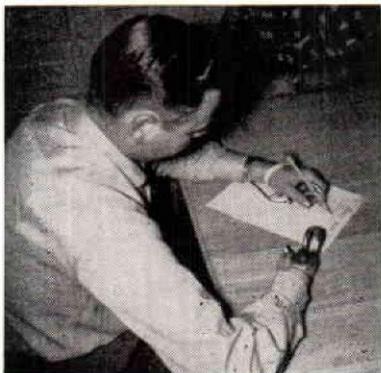
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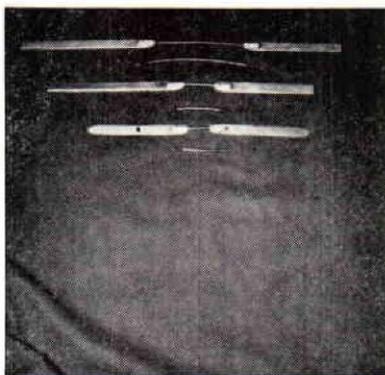


Robin-Aids
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This "Locking Lever Hinge" was primarily designed for those short B/E amputees.

Provides the short B/E with a full range of flexion, plus positive lock, which will tolerate as much weight as the individual can tolerate.

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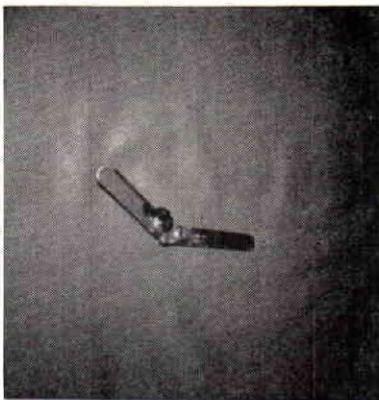
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Available in Kit-Form.

Stainless steel construction with small Aluminum Hook.



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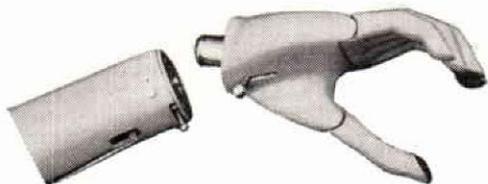


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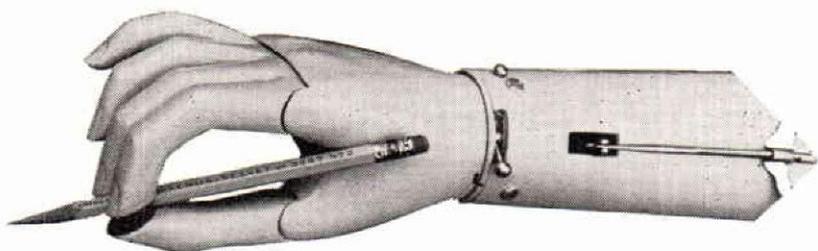
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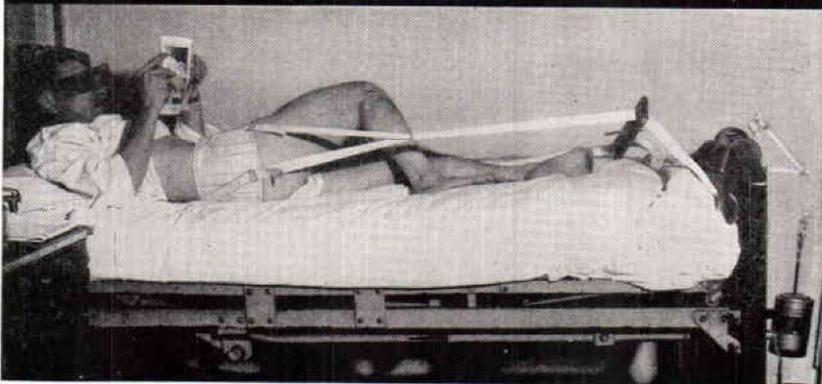


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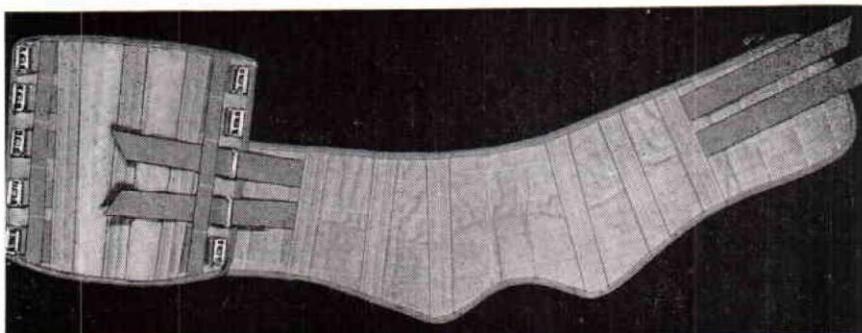
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A merger between Sierra Engineering Co. and the R. A. Hawks Company, both of Sierra Madre, California, took place on August 1, 1953. The new company will be known as Sierra Engineering Co. and will continue to provide the same good prosthetic products as in the past.

In fact, the new Sierra will be in a stronger, better, position to serve you we will have the best and most modern inspection equipment skilled inspectors to guard the quality of the Sierra products that you use modern, high production machine tools operated by men who in many cases have learned their trade with R. A. Hawks, and have spent many years adding to their basic skills. All this will be ADDED TO the skilled team that has been serving you for the past six years.

Richard A. Hawks, founder of Sierra Engineering Co., will continue to serve as Sierra President and Chairman of the Board. He is also the founder of the R. A. Hawks Company which through his efforts has become one of the leading precision machine shops in the Southern California area. The complete facilities, personnel and quality of work have earned a fine reputation among the aircraft, instrument and accessory manufacturers here. Hawks Company also manufactures and markets a line of surgical anesthesia equipment and is one of the leading manufacturers of aircraft high-altitude breathing equipment.

I have mentioned all this to try to picture for you the fine group of people, equipment and experience that is joining Sierra. Full use of this group will be made in the manufacture of good prosthetic products.

The prosthetic program, and the needs of the amputee, have been of major interest to Richard Hawks. During the past year he has guided the course of Sierra toward this field. This has resulted in the major interests and efforts of Sierra being concentrated in

the prosthetic field. THE SAME COURSE WILL CONTINUE TO BE FOLLOWED.

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No basic changes in the Sierra marketing structure are contemplated. We are proud of the increasing efforts of our distributors and are anticipating even closer cooperation. These distributors are carrying larger inventories of good Sierra products in order to fill your requirements and serve you promptly.

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1. A broader capital structure.
2. Greater emphasis on research and development.
3. Expanded production facilities.
4. Modern quality control.
5. A top quality engineering and manufacturing team.
6. Good products an expanding line.
7. A deep interest in the prosthetic field.

That's the picture! I would like to receive your comments, and would be happy to answer any questions you may have that are not covered in this letter. The latch string is out at our plant and I hope that you will find it possible to include a visit in your future plans.

This merger is a progressive step in a growing industry and will open new possibilities for us all.

Sincerely yours,

All the people at Sierra Engineering Co.

ATTENTION BRACE SHOPS

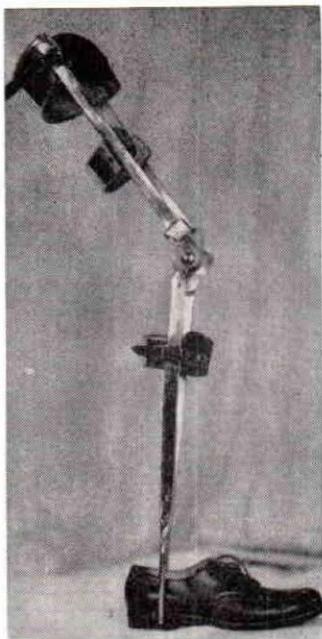
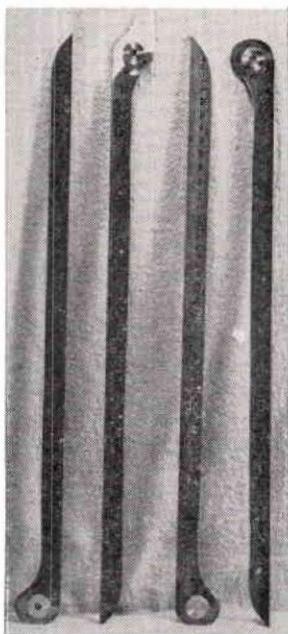
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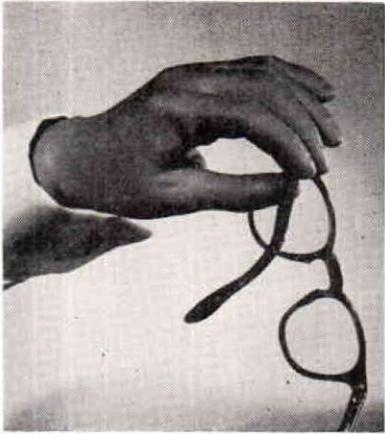
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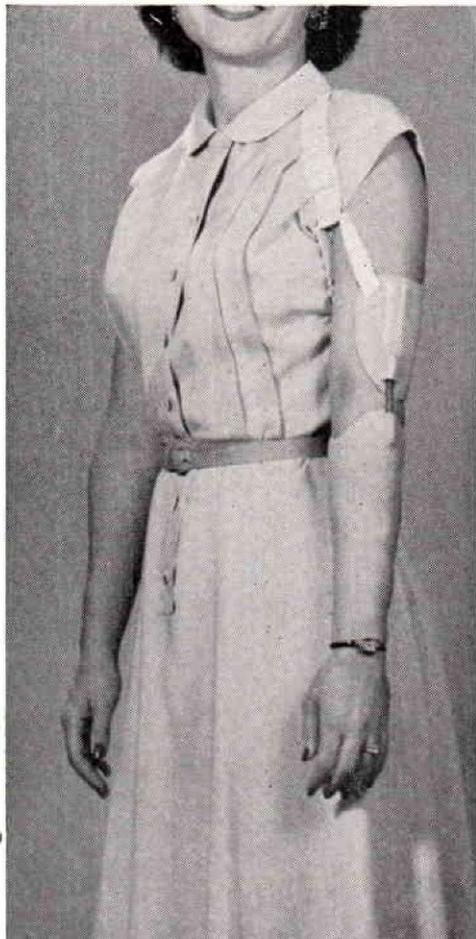
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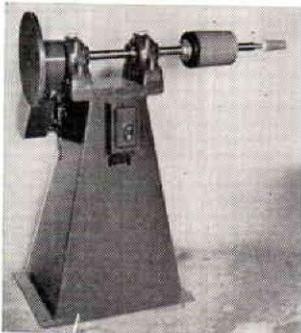
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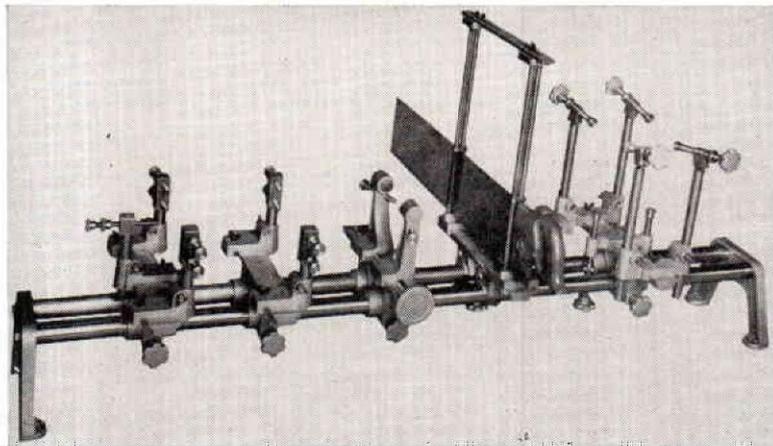
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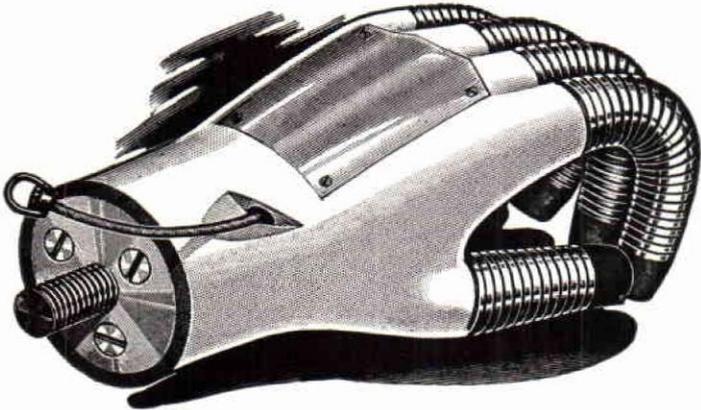
This jig makes possible the exact duplication of the alignment that has been worked out on the Adjustable Knee.

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LUCIUS TRAUTMAN, President

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SEE THE NEW LOCKGRIP HANDS



- WITH** improved finger lineup, enabling the thumb to grasp between 1st and 2nd fingers.
- WITH** naturally shaped and molded rubber finger tips.
- WITH** Finer gauged and stronger flat finger spring wire, adding to the jointed fingers flexibility.
- NEW** Realistic cosmetic gloves exceedingly lifelike in sizes 7 1/2—8—8 1/2.

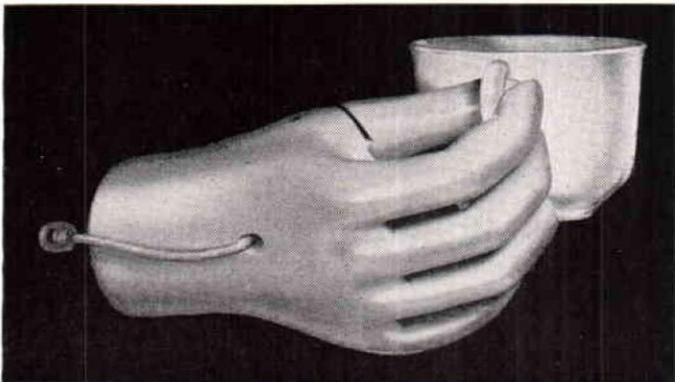
A lighter, stronger and the most useful of all mechanical hands, in sizes from 6 to 10, all wrist styles.

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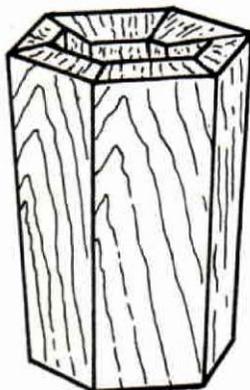
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You can save time and money with these thigh socket blocks. These straight grained, thoroughly dry blocks enable you to pull sockets in half the time.

*All blocks 14" long
Wall thickness 1 3/4"*

Size 6.....	\$ 4.35
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Size 8.....	5.50
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Size is inches across flats at top



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1 Unit consists of
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38" wide cloth—1 to 10 yds.	\$2.55 yd.
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Ampu-Talc—The IDEAL Amputee's Powder
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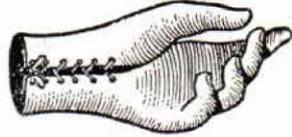
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These famous lightweight hands have spring thumb and wood core. Your order filled by return mail.

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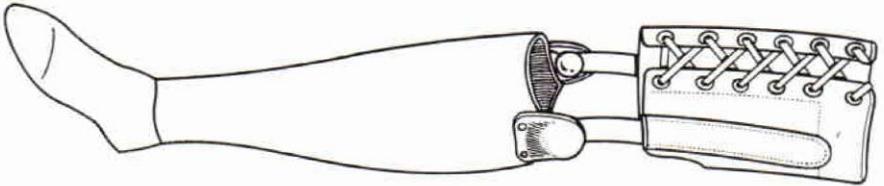
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THE NEW CUSHION GUM SOLE

Saves time and money for the limb manufacturer—affords "satisfied patients"—this sole has long life and natural resiliency. Sizes available for both men and women.

Price: \$5.00 each Net—\$54.00 per dozen Net.



N - E GUARDS

We have produced this item to meet numerous requests for a below-knee joint protector. These N-E Guards are made of vulcanized rubber. They cover the side, front and back of the joint. Trousers are protected. May be easily mounted on any type of appliance with saucer type washers and 1/2-4 oval head screw. Ask for sample.

Price: \$3.50 per dozen

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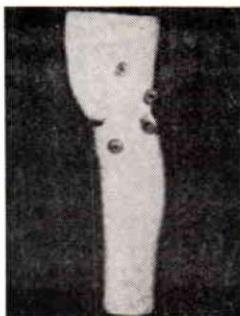
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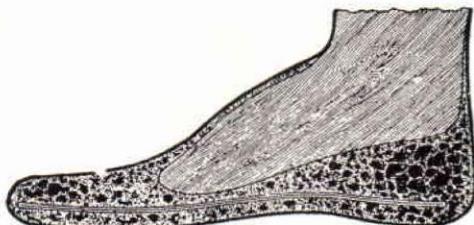
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The "LAMMERS" KNEE"

The body weight is used for walking and securing the joint—saves the amputee's strength!

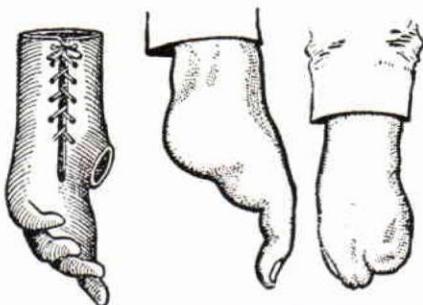
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RUBBER FEET

Made in all sizes for adults and children—high quality cushion gum rubber with extra strong canvas reinforcement.

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FOR PARTIAL HAND AMPUTATIONS

These artificial hands are made expressly for partial hand amputations, out of the finest cushion gum rubber. They may be fitted with skin-matched gloves (extra). Write for our special form giving instructions for taking proper cast and measurements. These gloves may be modified to suit any amputation.

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Solid Rubber Grinders with Tapered Hole—Fits on Tapered Spindle.

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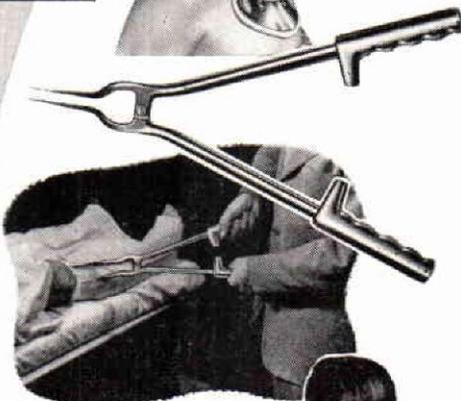
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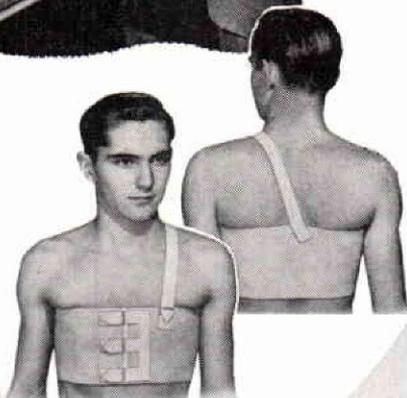
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NEW RIB BELT

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GERMAN BRACE AND LIMB SHOPS

Report of a Visit in the Spring of 1953

by LAURENCE PORTEN

President, Union Artificial Limb Company, Pittsburgh, Pa.

We sailed from New York on the "Queen Elizabeth," April 22. My party consisted of my wife, two daughters and one grandchild, also, my very good friend, Mr. Otto Becker and family from Detroit.



Laurence Porten

In five days of quiet sailing, excellent meals, and good rest, the ship drew closer to our destination, Cherbourg, France.

In Paris, we spent three days sightseeing the famous places. On May 1st, we started out early to avoid heavy city traffic, but in every street there were people assembling for the labor holiday. We passed through Choullomiers, Sezanne, Vitry Le France, St. Dizier, Toul and Nancy, then Luneville, Badonviller, Alar-mont, Shirmeck, Molsheim and Stras-burg. (Many of these towns and places I had seen in the first World War and it was a thrill to visit them after more than thirty years.) We crossed the Rhine River to Offenburg in Germany. The following day we travelled to Baden-Baden, and on the *Auto Bahn* to Stuttgart-Ulm and Augsburg. After an overnight stay, we continued to Munich and our old home in the outskirts, where we visited old friends in the city and I then spent most of my time in the various limb shops. Munich, as well as the other German towns we had seen, had been bombed terrifically during the war and the people are working hard to restore the buildings and housing facilities.

On May 8th, we started our journey across the Alps to Austria and Italy. The winding steep mountain roads led us to Innsbruck, the famous Austrian alpine town. Soon our car was climbing up again, ascending to 7,000 feet and more up the mountain sides—through snow and roads just wide enough for our big Oldsmobile.

A Walking Machine

On May 14th, we were on our way to Telfs, Fernpass, Lermoos, Garmisch and Oberau where I visited Mr. Schmid who is quite famous in Germany for making orthopedic machinery. He has built a new walking machine for any fitting room with little space, that makes the parallel bars obsolete. This is a conveyor belt about 8 ft. long, 2½ ft. wide, less than 1 inch high and weighing about 400 lbs. The patient steps on it, fastens the overhead harness and starts with a slow speed. At his own command, he increases or decreases the speed. I have seen it in use and have ordered some for my own fitting rooms and shop. I will introduce it in America and act as the distributor. Mr. Schmid also makes belt sanding machines, wood socket cutting and grinding machines which make hand cutters obsolete, and finishing machines with dust suction spindle.

The Habermann Shop

I paid a visit to one of the great orthopedic mechanics of Germany, Mr. Habermann, who is famous for his Schede Habermann physiological knee joint as well as other improvements in alignment, etc. Having known him since 1922, when I studied

his technique for six weeks at his plant in Munich, we had a very interesting afternoon together and he demonstrated to me his newest findings in alignment. I believe he has very good points in saving labor. He also copies the stump shape and measurements from a plaster cast. Mr. Habermann's shop is crowded but impressive, and he plans to build a new plant.

Later on, I visited Mr. Feierabend, who is the Chairman of the Professional Organization in Bavaria and Munich. He, too, is an old friend and acquaintance of mine. In 1929, we were sent by the government to London to study the Desoutter metal limbs which he introduced in Germany. He is a very skillful orthopedic mechanic who has various patents on leg and arm parts. At present, he is working on a new mechanical metal hand.

I visited several other shops to check on their manufacturing and fitting methods. Most of the Munich limb shops have been bombed out during the war, therefore, they are still suffering from lack of adequate rooms, buildings, tools, machines and most of all, materials. However, they all work hard to overcome these handicaps and are very confident that they will again be on the top soon.

On May 16th, I drove to Endorf, which is a small town near Roseheim. Mr. Kleinekathoefer, who is the inventor and manufacturer as well of the well known wing bearing knee brake, which they use all over Germany, maintains a small but modern factory near his country home. I have used his "knees" for some time now.

The Sportsanitarium

On May 20, I started out for the *Sportsanitarium* in Isny, Allgaeu which has the most modern gait training school in Germany. It was recommended to me by the Germany National Limb Makers Association, and I already had heard a great deal

about the excellent results. This modern sanitarium was financed and built by the War Veterans' Organization with donations from the government and private funds. Located in a wooded area, it is ideally suited for the purpose and is under the direction of Karl Sell, M.D., and Specialist for Orthopedics. His administrator is a war veteran who really is the creator and brain behind the whole thing, and actually started the Sanitarium on "one leg" as an above-knee amputee. He is the most famous one-legged skier in the Alps and pictures of him have been shown in American theaters. Dr. Sell gave me some demonstrations of his new technique in walking training with below and above-knee amputations, and has entirely new ways, more or less unknown to American teaching. It is my opinion that it will revolutionize physiotherapy as far as amputees are concerned. His new ideas and findings will be published in a book on which he is now working and I hope it will benefit our rehabilitation centers a great deal.

Dr. Sell and his administrator asked me to extend an invitation to all interested Americans, doctors, physiotherapists and limb makers to visit this Sanitarium and they hope some day American amputees will join the others in an international spirit of brotherhood. I must not forget to mention that the Sanitarium itself has bedrooms, beds, windows, bathrooms, toilets and dining rooms which are entirely designed to help the leg and arm amputee and to make them independent. Simple and most modern gadgets are everywhere, and our architects who build hospitals could learn a lot in Isny.

I travelled north again towards Tuttlingen which is well known for the surgical instruments and orthopedic joints. I had a long conference with Mr. Link and Son, exchanging views and ideas concerning our problems in the Orthopedic fields.

Visit with the German Association

Prior to leaving America, I had received an invitation to attend the Annual Convention of the German Limb and Brace Makers Association as a special guest. I was scheduled to speak on May 22nd about Orthopedics in America. I was given a half hour speaking time, but when I stopped, the audience and the Chairman urged me to go on and at the end of about an hour and 15 minutes, I received such an ovation that it left me speechless. After the lunch recess, the Chairman announced that the Association had decided to award me an honorary Life Membership in the German Orthopedic Association.

The Convention ended after three days. I met so many of my old friends and colleagues from 20 and more years back, that with deep sincerity, I enjoyed every minute of it and would not have missed it for anything in the world.

Of course, I did not forget to extend greetings from the OALMA and friends. I also told the Convention about the success and respect we have earned in America as a professional organization, and how hard we have been working the last six years to achieve our goal. I described our rehabilitation system, the Veterans Administration Program, the various charity funds, the Research Institutions like the Mellon Institute, the U.C.L.A. in Los Angeles, Berkeley, the Veterans Administration Laboratories, the Army and Navy hospitals research programs and over-all guidance by the Committee on Artificial Limbs, National Research Council. I quoted statistical figures and outlined our American way of making and fitting artificial limbs and braces.

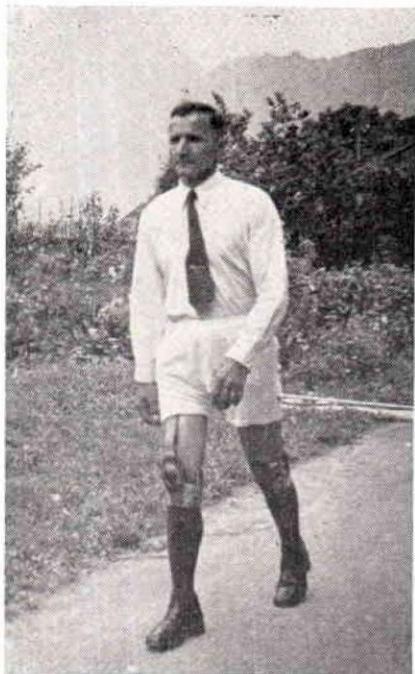
I assured the Convention that the OALMA, as well as all the aforementioned institutions would be glad to exchange ideas and practical experiences with the German organization

or members, and I presented the Chair with all the American printed research material which was given to me by the various institutions. I am taking this opportunity in the name of the German convention to thank everyone involved for these donations which were given in an international spirit of brotherhood and mankind.

The evening was followed by the customary banquet in the Kurhaus; this was an affair of warm humor, gaiety, dancing and cheerful spirit. Since Durkheim is a famous wine town with many wineries, free donations of their products to the Convention helped to raise the "spirit." The town honored the Association Committee with special made wine glasses which bear the town's insignia and coat of arms and I also received one as "honor guest" from America.

After the Convention I stopped only in Mannheim and Heidelberg, then headed back to Munich to meet my family. On May 28th, we had our car packed for the big journey to Switzerland and we took the beautiful and scenic mountain road via Immenstadt. We crossed the Swiss border and proceeded via Schaffhausen to Bern. While my womenfolk could not resist the urge to go shopping, I made a trip to Lauterbrunnen, Murren and Kleine Scheidegg by auto and indulged in the sublime view of the Grandoise Jungfrau, Eiger and Monch and other famous peaks. Some of these peaks I had climbed in my youth, with ice ax, rope and skis, but now, I had to be satisfied to look at them and dream.

We continued our voyage toward Kufstein in Tyrol where I had an appointment with Fritz Striede, the famous Austrian Orthopedist. Actually, he is a German by birth and received his training in Germany. He made improvements on existing prosthetic appliances and had several patents which made him known in Germany



The Striede Artificial Limb.

and Austria. His advice was sought in Vienna and Innsbruck and the Austrian Government invited him to establish a shop. He selected Kufstein in Tyrol, a small mountain resort, where he is now beginning to develop his shop into factory lines. His spreading establishment will soon have all facilities to house his patients in private rooms or wards, to have house physicians and physio-therapists, Turkish baths, massage rooms, swimming pool, recreation rooms and gardens. Momentarily, he has 58 workmen to help him make the artificial legs and parts which are shipped to limb shops all over Austria and other countries in Europe.

As a bachelor, he spends every minute of his life in his shop and among his amputees and his present dream is to have his own research laboratory and start a school where specialists can be trained and research work continued.

The Striede Knee

The Striede Knee itself imitates nature as close as possible because it had no fixed axes or bolts. The connection is between the proximal and the distal end of the femur. These parts are covered or made with synthetic resin and the cartilages are of greased leather. The movements of the Striede knee are distinctly different from that of the Conventional Knee bolt legs and quite similar to the natural leg. Therefore, it is hard to detect which leg is amputated.

As a means of attachment to the leg to the stump, Striede uses a method similar to the Suction Socket. However, he does not depend at all on suction, but uses a slight muscular contraction which is sufficient to hold and control the leg. It also exercises the muscles in the stump and prevents atrophy. The fitting of the socket to the contracted muscles requires a par-

ticular shaped socket, the high front edge leading into a trough-shaped segment, which allows room for the adductor on the medial side. The tuberosity part is shaped and cut out to allow a weight bearing on the lateral side of the ischium, thus using the muscles and sinews to reduce the impact of the artificial leg on the tuber and to contribute to soft natural walking. (Moving the weight bearing aspect to the lateral side of the ischium will also aid in a better alignment of the leg). The artificial foot is a combination of wood and rubber, designed by Striede, without metal ankle joint, and follows also the natural pattern of a human foot by giving a remarkably firm stance. This foot is used in A.K. and B.K. legs alike and adds to the natural gait of the Striede Knee.

When Striede showed me his fitting room, it was well filled with about 30 patients. However, the unusual part of it is that they consisted of men, women and a few youngsters, all these being amputees of some sort or other. Bilateral A.K.'s and B.K.'s with suction sockets and they all sat or walked there in this big room, talking in different languages. He introduced me to an international flock, proving that his customers are coming from all over Europe and some from Asia and North and South America. His theory is not to separate the sexes but let all these amputees train and walk together, just as soon as they are fitted with legs and have a desire to join the crowd in the big fitting room. They watch, criticize and help each other and will benefit from that. Without his intention, his institute has become a matrimonial agency because about 50 marriages so far have taken place between his patients.

After showing me all his work in detail and outlining his plans for the future, he asked me to act as his dis-

tributor in America, which I accepted. I can see a great future for the Striede Knee in America and wish every limb shop can stock the parts and use it, thus giving the benefit to all amputees.

After this remarkable visit, we left for Munich and arrived at our temporary home again. The last few days we spent among friends and relatives and preparing for our departure.

On June 11th, at 6:00 P.M. we again boarded "The Queen Elizabeth", and the usual routine for the five days-crossing began.

Summary

Summarizing my experience in Germany, in regards to the orthopedic field, I have seen many interesting things which should be worth exploring. I have stopped in many limb and brace shops which are still suffering from the lack of material, machinery and skilled workers, due to the war damages.

However, I have also found the will to come back and to improve and create things and to help the fellow man. Many shops have most modern machines and equipment (much better than what we have in America). Others are still in a primitive state. Artificial limbs and braces are of a better design and fit, and suction legs are predominant. In artificial arms, we have an edge, however, every effort is made to improve.

The Limb and Bracemaker Association is eager and willing to cooperate with our American Association in every way possible and the "Latch String" is out for every visitor in Germany.

WESTERN SCHOOL UNDERWAY

by C. O. ANDERSON

President, Prosthetic Services of San Francisco



Region X's class in Anatomy poses for a picture with the class skeleton.

Region Ten, or more properly, the Western Orthopedic & Prosthetic Appliance Institute is sponsoring a new kind of school. For the past several months, shop owners and the certified orthotists and prosthetists of the San Francisco Bay area have been meeting together weekly to take instruction in matters related to appliance making. There has been an almost 100% cooperation among the various shops and a fine attendance record.

Instructors for the classes are the doctors of Western Orthopedic Association who are donating their time and services. A committee headed by Dr. Chas. O. Bechtol has been appointed by that organization to insure cooperation. Others on the committee are Drs. Douglas Dickson, Don King, Neil P. McCloy, E. R. Schottstaedt, Brett Smart, Calvin K. Terwilliger, Douglas D. Tofflemier.

Emphasis is heavy on the study of anatomy and on the pathological conditions encountered by orthotist and prosthetist. Owners and certified men are acting as *shakedown crew* for the establishing of a curriculum and course of study. It is expected that this phase will have been completed in six months more and the course will be extended to journeymen and workers who are not certified. Eventually the same instruction will be set up for apprentices.

The class now meets under the auspices of the Oakland City School System which furnishes quarters and other items. A committee from the industry composed of Ned Snygg, Matt Laurence, Mori Morris, Herbert Hart and C. O. Anderson act as a trade advisory committee. The last named also acts as moderator for the class.

Walter R. Sievers 1894-1953

WALTER R. SIEVERS, president of Amsterdam Bros., Inc., of New York City, and a partner of Amsterdam Bros. of Syracuse, N. Y., died of a heart attack on July 11th, 1953, at his home, 19 Shadow Lane, Great Neck, Long Island, N. Y.



He was born in Chicago, Ill., on September 21st, 1894. At an early age he was taken to Europe by his parents, and

there received his education at the Berlin Gymnasium from which he was graduated with honors. Upon his return to the United States his education was continued at the City College of New York.

Mr. Sievers was a member of Queens Lodge of the Elks, and of the Parish Club of St. Gabriel's Episcopal Church in Hollis, L. I.

In both the OALMA and in the Metropolitan OALMA of New York City, Mr. Sievers had served as president. He was one of the incorporators of the American Board for Certification, and a member of its first Examination Committee. At the time of his death he was a director, and the secretary-treasurer of this Organization Board.

On numerous occasions Mr. Sievers was invited to lecture on orthopedic appliances before Industry and Doctors' Meetings, and at the Mellon Symposium in Pittsburgh.

In the passing of Walter R. Sievers the Brace and Limb Profession has lost a valued and talented member who has made for himself a very special place in the hearts of his friends

and co-workers.

He is survived by his widow, Ruth Smith Sievers, to whom he was married in 1921; and by a sister and a brother. The OALMA and the American Board for Certification join in extending deep and profound sympathy.

Funeral services were conducted at St. Gabriel's Episcopal Church in Hollis, L. I.; and the interment was at the Rosedale Cemetery in New Jersey.

"Green be the turf above thee,
Friend of by-gone days;
None knew thee but to love thee,
Nor named thee but to praise."

David E. Stolpe

Among the many tributes to Walter R. Sievers from officers and colleagues, were:

D. A. MCKEEVER: "Walter Sievers literally gave his life to advance our profession. His entire business career was devoted to rendering professional service on a very high plane."

LEE J. FAWVER: "Our industry has lost a great man—a great asset—a great friend and benefactor."

CHESTER C. HADDAN: "The loss to the orthopedic and prosthetic appliance profession and the certification movement for this profession through the passing of Walter Sievers is severe. His great qualities of leadership, his wise counsel, his keen understanding of human nature, his appreciation of the problems of the handicapped together with a simple humility combined to make Walter Sievers one of the outstanding personalities of our time. The great humanistic qualities which he possessed in such abundance, are rare in our civilization of today."

T. CAMPBELL THOMPSON, M.D.: "His death will be a great loss to many amputees and paralyzed patients, as well as to the rest of us."

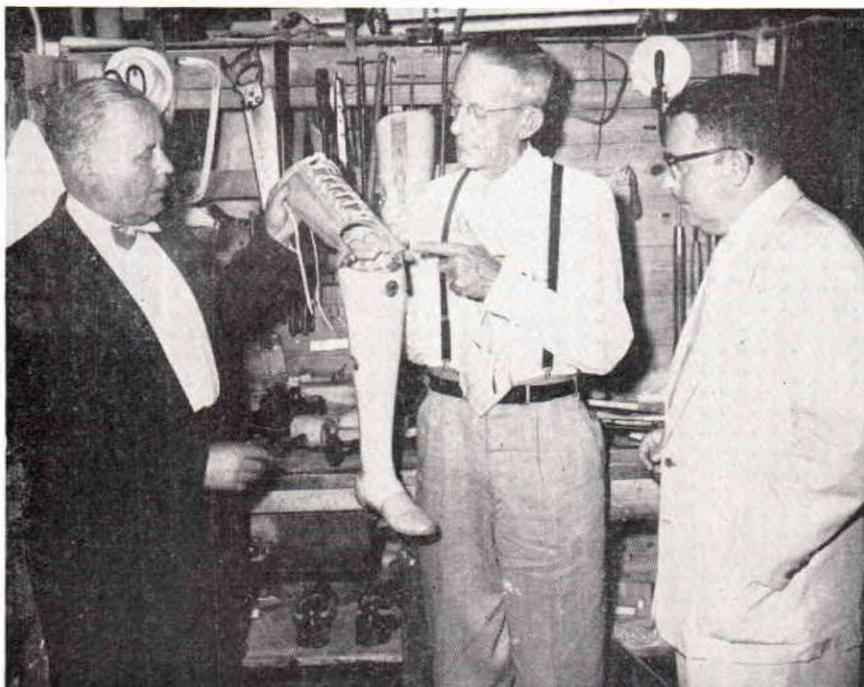
DR. GEORGE H. YOUNG: "All of us in Mellon Institute who had been privileged to know and work with him held him in high regard. We used to think of him as an honorary Fellow of the Institute, and I believe that Walter liked this thought, too. We shall miss him sorely."

JULES AND SAMUEL B. AMSTER-

DAM: "We enjoyed the most pleasant and cooperative partnership that one could wish to have. Words fail us to express the terrific loss we suffer in losing Walter as the man, the partner, and friend."

GLENN E. JACKSON: "Probably none will ever know as I did the tremendous contribution Walter made to our cause. He gave tirelessly to committees, boards and meetings. The history of our progress will be dotted with his name."

AMERICAN RAWHIDE CELEBRATES SILVER ANNIVERSARY



Munson A. Emery, president, and Howard P. Emery, secretary-treasurer of the American Rawhide Mfg. Co., chat with W. D. Mathis, vice-president of the J. A. Hanger Co. of Illinois. The two Emery brothers founded American Rawhide organization in 1928.

WALK-AID RAILINGS

by **PAUL E. LEIMKUEHLER**

Director, Region V of OALMA; President, Leimkuehler Limb Company

(Editor's Note: Here is a story showing how one OALMA member developed a new service for his patients. If you have worked out a new service, or have improved features of your establishment, let us have an account of it.)

The old saying "Necessity is the mother of invention" is certainly a true statement when reviewing the history and development of the "Pel Walk Aid Railings."

When Paul Leimkuehler started in the artificial limb business, almost five years ago, his primary interest was to benefit the amputee as much as humanly possible. He offered free walking instruction to all new amputees, providing they would come into the shop two or three times each week for training between walking railings and mirrors. However, only about ten per cent of the amputees took advantage of the free training offered and even those ten per cent did not come in too often. Their excuses were numerous: "Taxi fare is too expensive" — "My son has to work during the day and can't drive me downtown" — or "It's just too hard for me to get out." It appears that no matter how much emphasis was put on the necessity of getting to the shop and learning how to walk properly, they still would not take advantage of the free service.

Paul learned to walk on an above-knee artificial leg in an Army hospital and realized how important it was to have railings during the first two months of walking training. One of the most important factors in learning to walk properly was to have confidence and no fear of falling. Railings appear to be the only solution to this problem because crutches always leave a fear of falling and any type of walker which has wheels may possibly roll away from the patient.



The railings in use.

If the walker does not have wheels and is picked up and moved along, then, of course, the style of walking is not developed properly. There was a real need for some type of railings that could be set up at home and yet be portable so that an average individual could take the railings home, set them up, use them at will and take them down whenever they were not needed.

The actual development of the railings from the time of the basic idea to the present date required more than three years.

One day, Paul was looking at a magazine advertisement of a major air line, and noticed the railing on the ramp leading up to the airplane. That gave him the idea of using bent steel tubing such as is used in kitchen

furniture. He found, much to his surprise, that with the thin walled steel tubing, he could get more strength and less weight than he could with using aluminum tubing. He immediately sat down and started to design a set of railings made of steel tubing and minimum of welding and special made parts. After he had a basic design, he contacted a tube bending company which has hydraulic benders and after some discussion with their engineers, came up with the approximate present design.

The unique design and sturdy construction of the Walk Aid railings provide maximum safety and stability necessary for the successful rehabilitation of a patient. These railings can be assembled in less than 5 minutes without the use of tools. The railings measure $9\frac{1}{2}$ feet in overall length, and the height can be adjusted from $30\frac{1}{2}$ to $37\frac{1}{2}$ inches in 1 inch increments. Sections are constructed of cadmium plated steel tubing, and rubber mounts hold the railings stationary. Total weight is only 35 pounds. Because the length of the sections does not exceed 54 inches, the Walk-Aid railings can be laid flat on the floor of an automobile for portage. Heavy elastic straps hold the various components together while they are being carried or transported.

The Leimkuehler Limb Co. has been renting both the final design railings and various experimental models for the past two years and found many people benefited from the use of these railings. Some people have gone so far as to say that they felt they never could have learned to walk without the railings. Some people have attempted to get along without railings and could not learn to use their legs on crutches, but after they rented the railings for a month or two, progressed quite well and eventually learned to walk. Other handicapped people such as polio, paraplegic and hip fracture cases,

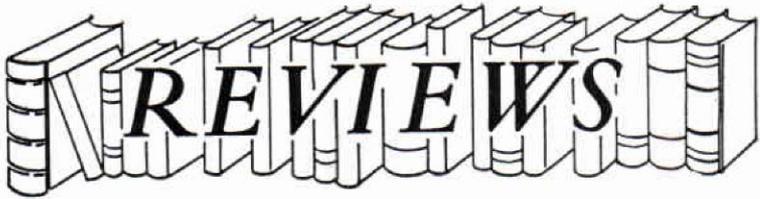


The railings are portable.

have made good use of these railings.

Paul designed the railings to aid his own customers. However, now that they are perfected, he is selling them to any company, hospital or institution who wants them. To his customers, he rents the railings for \$10.00 for the first month and \$8.00 for each additional month. Usually one or two months is sufficient, except in the case of a double A/K or an elderly patient. He has had an average of eight railings on rental for the past two years, so you can see that even without publicity there is a demand for the railings and, of course, the income from the rental is quite attractive at the same time. The rental of these railings to his patients is an added attraction to the type of service his company renders.

Reprints of articles are available. Inquire of OALMA, 336 Washington Bldg., Washington 5, D. C.



REVIEWS

OFFICE ORTHOPEDICS

By Lewis Cozen, M.D., F.A.C.S.
Second edition, 303 pages. Philadelphia, Lea & Febiger, 1953.

Reviewed by R. W. Goldsby, R. W. Goldsby Orthopedic Appliances, Mobile, Alabama.

"Office Orthopedics" by Dr. Lewis Cozen is one of the most practical approaches to the subject I have yet read. Being an Orthotist my interest lay in his treatment of braces and those items with which the brace-maker is concerned. Books of this type, while written for the medical profession, are excellent reading for the Orthotist who in reality should be just another instrument to be used by the doctor in his practice. Read it and profit as I did.

SHOEMAN'S MANUAL

By William E. Gill. Published by the author at Camden, Maine, 1952. 73 pages. \$2.00.

Reviewed by Carlton Fillauer, Secretary-Treasurer, Fillauer Surgical Supplies, Inc.

A sizable majority of orthopedic appliances are in some manner dependent on the patient's shoes. With the advent of synthetic materials and the new high speed production methods now in practice in shoe manufacturing, many low cost shoes are not suitable for orthopedic work. New shop methods are required for adding cork elevations. The orthotist should be familiar with at least the popular methods of shoe construction in order that he can determine, on sight, the feasibility of performing

orthopedic work on the shoes.

Shoeman's Manual is the answer. With this information an orthotist can judge with authority. Ten shoe constructions methods are well illustrated in progressive steps from start to finish.

It is a year book and the last word on inside construction techniques. Every orthotist should have it in his library.

FUNCTIONAL DISORDERS OF THE FOOT

By Frank D. Dickson, M.D., F.A.C.S., and Rex L. Diveley, A.B., M.D., F.A.C.S. Third edition, 345 pages. Philadelphia, J. B. Lippincott Company, 1953.

Reviewed by Ted R. Reynolds, Orthotist, The W. E. Isle Company.

"Functional Disorders of the Foot" is a concise text on the authors' experience in treatment of disabilities of the foot.

Although the book was written primarily for the use of the medical profession, it is of great value to the orthotist, as it contains a wealth of information concerning the correct type of shoes, proper supports and their construction and placement, all of which are easily understood and clearly illustrated.

In this third edition the authors have made revisions to include new information brought to light during World War II, and have added many new illustrations.

The distinguished authors, Frank D. Dickson, M.D., F.A.C.S., and Rex L. Diveley, A.B., M.D., F.A.C.S., operate a private clinic in association with Paul W. Meyer, M.D., and

Richard H. Kiene, M.D., in Kansas City, Missouri. Dr. Dickson is Clinical Professor of Surgery at the University of Kansas School of Medicine, Orthopedic Surgeon St. Luke's Hospital, General and Wheatley Hospitals, Kansas City, Missouri, and Providence Hospital, Kansas City, Kansas. Dr. Diveley is Assistant Professor of Orthopedic Surgery at the University of Kansas School of Medicine, Chief Orthopedic Consultant Veterans Administration, Washington, D. C., Chief Orthopedic Surgeon Kansas City, General, Orthopedic Surgeon St. Lukes and Wheatley Hospitals, Kansas City, Missouri, and Providence Hospital, Kansas City, Kansas.

The book contains 20 chapters, beginning with evolutionary development of the human foot and continuing to cover in a well organized manner such subjects as anatomy, physiology and foot imbalance, as well as many other subjects which make for a complete coverage of all phases of diagnosis and treatment of a multitude of foot disorders.

The Chapter on Anatomy gives sufficient basic facts as to the proper functioning of the foot. The anatomical structures are well illustrated. The weight bearing points are well described and illustrated and there is a detailed description of the foot arches.

One of the most important Chapters is the one on "The Foot of Childhood". As is so aptly pointed out, the foot of childhood is the forerunner of the foot of the adult and if it is properly shod and trained will assure the adult of a strong and healthy foot.

Three Chapters are given to foot imbalance covering the three important stages of life, Childhood, Adolescence and the Adult. In each of these chapters the authors' opinion of the proper type of footwear is described.

The entire book should be most interesting and informing to the

Orthotist.

It has been my good fortune to have worked with the authors, as an orthotist, for many years. The opportunity to observe their outstanding success in treatment of foot disorders has made a profound impression. I sincerely believe that a knowledge of the contents of "Functional Disorders of the Foot" will aid the orthotist to a better understanding of the physician's problems in the correction of foot disabilities, and should enable him to better appreciate the need to efficiently and accurately carry out their instructions.

CLINIC ON CONGENITAL AMPUTATIONS

Published by the Kessler Institute as volume 1, number 2 of its Proceedings. West Orange, N. J., 1953. Edited by Henry H. Kessler, M.D. and Trudy Drucker. 35 pages.

This number contains five articles on the congenitally malformed individuals. Of prime interest is Dr. Kessler's own paper on *The Management of Congenital Amputations*. Dr. Harold A. Murray writes on *Pediatric Aspects of Congenital Amputations*.

THE SCIENTIFIC PAPER; HOW TO PREPARE IT; HOW TO WRITE IT. 2nd Edition

by SAM F. TRELEASE

Published by: Williams & Wilkins Company, Baltimore, Md. 163 pages. \$2.50.

This handy little book will help *Journal* readers when they want to write reports or articles. There are useful hints on making the paper interesting, arranging ideas logically, collecting facts, and dealing with the editor and printer. The book was prepared for the scientist and college student, but can be read with profit by anyone in the limb and brace profession. Sooner or later comes the time when we all have to write something which is to be printed; this book makes that an easier time.

FOUNDER OF OALMA FIRM



The late Edward H. Warnick.

• THE E. A. WARNICK COMPANY of Wilkes-Barre is celebrating its Sixtieth Anniversary this year, having been founded by the late E. H. Warnick in 1893. E. A. Warnick, son of the founder, is head of the company and is also Director of Region III of OALMA (Eastern Pennsylvania, Delaware, Maryland, Virginia and the District of Columbia.) One of the first to support Certification, Mr. Warnick holds Certificate No. 93 from the Board. His wife, Mrs. Nellie Warnick is a past president of OALMA's Ladies Auxiliary.

• The Wichita, Kansas Facility of the Winkley Artificial Limb Company has moved from its former location, 237 N. Market St., to 736 North Main St., Wichita 5.

• James Price is now manager of the Charlotte, N. C., office of J. E. Hanger, Inc. This office is under the general supervision of R. H. Taylor, state Manager, who has headquarters at Raleigh.

In Memoriam

MRS. ANNA COEN ISLE, the widow of the late W. E. Isle, died September 12, 1953, at Kansas City. Funeral services will be held in that city on September 16. Mrs. Isle survived her husband by only four months. She was keenly interested in the two companies which Mr. Isle organized and took an active part in developing the manufacture of the stump socks. She is survived by three daughters: Mrs. Loraine Isle Dillard of Kansas City, and Mrs. Burton J. Davis and Mrs. John Hakman, both of Los Angeles.

LUTHER T. LEWIS, died February 22, 1953, at the age of 57, following a heart attack. Mr. Lewis began work with the Hanger organization in 1917 and became a skilled limb and brace fitter, with rare ability to handle unusual cases. He was manager of the Oklahoma City Branch from 1940 to 1946. In June, 1952, he resigned because of ill health. He is survived by his widow, Mrs. Luther T. Lewis of Robertsville, Missouri.

MARTIN H. NANNEY of the M. H. Nanney Artificial Limb Company of Los Angeles, died July 22, at the age of 75, following a few months' illness. He is survived by his son, William M. Nanney. The company's operations are being continued by John Kolman, the present owner.

WALTER R. SIEVERS, past president of OALMA, and secretary-treasurer of the American Board for Certification, died suddenly July 11. (See page 50 for other biographical details.)

OALMA and the American Board for Certification join in extending heartfelt sympathy to their families, friends and associates.

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*Deceased July 11, 1953.

Our Code of Fair Trade Practices

Below is a digest of the rules governing fair trade practices as promulgated by the Federal Trade Commission, April 1946 and adopted by the American Board for Certification in August 1948.

It is an unfair trade practice:

- (1) To deceive purchasers or prospective purchasers as to any of the qualities of a prosthetic or orthopedic appliance, or to mislead purchasers or prospective purchasers in respect to the service of such appliances.
- (2) To infer that an artificial limb is equivalent or nearly equivalent to the human limb, complies with any government specifications, or has the approval of a government agency unless such be wholly true or non-deceptive.
- (3) To fail to disclose to a purchaser, prior to his purchase, of a prosthetic appliance, that the degree of usefulness and benefit will be substantially dependent upon many factors, such as the character of the amputation, condition of the stump, state of health, and diligence in accustoming oneself to its use.
- (4) To promise that any industry product will be made to fit unless such promise is made in good faith and the industry member is possessed of the requisite competence to assure his ability to fulfill such guarantee. A prosthetic device is not to be considered as fitting unless properly shaped for the body member to which it is applied, and in proper alignment and conformity with the physique of the person to wear such a product, and affords the optimum of comfort and use on the part of the wearer.
- (5) To deceive anyone as to his authority to represent and make commitments in behalf of an industry member unless such be fully true.
- (6) To use any testimonial or use any picture which is misleading or deceptive in any respect.
- (7) To demonstrate any appliance in a manner having the tendency or effect of creating a false impression as to the actual benefits that may be reasonably expected from it.
- (8) To use any guarantee which is false or misleading.
- (9) To represent that any appliance con-

forms to a standard when such is not the fact.

- (10) To publish any false statements as to financial conditions relative to contracts for purchase of appliances.
- (11) To engage in any defamation of competitors or in any way to disparage competitors' products, prices, or services.
- (12) To use the term "free" to describe or refer to any industry product which is not actually given to the purchaser without cost.
- (13) To wilfully entice away employees of competitors.
- (14) To take part in any concerted action with other members of the industry to wilfully fix prices.
- (15) To promote the sale of any appliance to any person who can not be expected to obtain reasonable benefit from such appliance.
- (16) To refrain from giving every assistance to doctors before and after amputation or crippling condition, or to fail to do everything possible to promote mutual trust and confidence between the industry and the members of the medical profession.
- (17) To undertake to supply an artificial limb by mail-order specifications without personal fitting thereof unless conditions are such which make an exception desirable, and in any case, no misrepresentation shall be made as to fit.
- (18) To unduly exploit features of appliances less important than proper fit and alignment.
- (19) To fail to recognize that the interest of the amputee and the handicapped is the first concern of this craft and therefore any failure to make available to all of its members and the general public any improved technique that may be used as to making, fitting, aligning or servicing of industry products shall be an unfair trade practice.

Further, the industry desires to be an active and cooperative factor in all progressive developments of improved techniques that will contribute to the welfare and comfort of all who wear its products.