

ENABLES BLIND TO 'SEE' BY EAR

New Device Substitutes Sound for the Touch System.

DOTS ARE USED FOR WORDS

Inventor Calls It "Typophonia" and It Is Read on a Phonograph Record—Unlike Raised Letter System, a Library Occupies Small Space, and Price Is Cheap—Blind Vienna Doctor Offers Invention Free for Use of Afflicted.

The blind and those whose weak sights prevent the use of eyes for reading may now read by sound instead of touch as a result of a recent invention by Dr. Max Herz, a Viennese specialist in heart diseases, who arrived in the United States recently. Dr. Herz came here at the request of a group of individuals and organizations interested in ameliorating the condition of the blind. He demonstrated his invention several days ago for the first time at a convention of instructors for the blind at Baltimore, where it was reported to have been received with enthusiasm.

The invention is based on a sound alphabet devised by Dr. Herz from the Morse code, eliminating the dash and using the dot in various combinations. A phonograph record is made of a story in the sound language. The record is placed on an instrument resembling a phonograph equipped with a sound box and the blind person, after becoming familiar with the alphabet is able to read by ear rather than through the fingers as in braille, the method in use at present.

The alphabet is based on the single dot, two dots and four dots used in various combinations. The phonograph record is made in the following manner: Using an instrument like a typewriter, the person engaged in the work will punch holes in a narrow tape, each group of perforations being a letter in the dot alphabet. The tape is then run through an electrical machine and the perforations are transferred in sound to a master record. Duplicate records are then made in any quantity.

System Called Typophonia.

Dr. Herz, who is a member of the faculty of the University of Vienna, calls his system typophonia, or reading by sound, and the instrument the typophone.

Typophonia has many advantages over braille, according to the explanation made by the inventor. First, it is easy to learn. This was evidenced by the fact that when Dr. Herz tapped out his improvised alphabet a visitor who heard it for the first time and who was familiar with the Morse code repeated almost all of the letters correctly when he heard the dots tapped.

On the other hand, says Dr. Herz, braille is learned with difficulty, especially by adults not born-blind. The sense of touch is not so acute as that of hearing. It takes months to learn braille, and to master the embossed dot alphabet of Louis Braille means a year or two of study on the part of many who pursue it.

When Dr. Herz's sight began to fail

three years ago and, forbidden to use his eyes to read, he began the study of braille, though a man of science and accustomed to intense concentration for long periods of time he was unable to master the method for a year or more.

The system of typophonia may be learned by any person in a fortnight, according to Dr. Herz. It need not take that long, and he tells the story of a young woman in Vienna who mastered it in a day, although he says this is exceptional.

Another Advantage Over Braille.

Another great advantage over braille is that a book of 200 printed pages may be transferred to a record six inches in diameter. The same book reproduced in braille would take about 1,000 pages. The braille book of 1,000 pages would entail the expenditure of a considerable amount of money by the person desiring to purchase it. The same book in the form of the typophone record, the inventor says, would cost from 2 to 5 cents. The typophone itself would call for an initial expenditure of about \$15. So that a blind person could build up an extensive library at an insignificant cost compared to the expenditure necessary to purchase the same library in braille.

Here the question naturally arises as to why use a sound alphabet to be reproduced by the typophone rather than to reproduce in the first instance the spoken words directly from an ordinary phonograph record. Dr. Herz's answer is that it would take 400 phonograph records to reproduce what can be reproduced on one six-inch record by means of the typophone. Then the spoken word on the ordinary phonograph is difficult to comprehend. The great expense involved in reproducing a book of 200 pages on 400 phonograph records is obvious, to say nothing of the space that one such "book" would occupy. A large apartment would be none too large to store the works of Dickens and Shakespeare reproduced in this manner. The entire works of Dickens and Shakespeare reproduced on typophone records would occupy a cylindrical box about six inches high and six inches in diameter. The cost would be trifling in comparison to the cost of the books in braille or in ordinary phonograph records. In braille the works of Dickens and Shakespeare would fill a large room.

The Bible in braille takes several volumes. Six thin typophone records costing from 12 to 30 cents would bring within the purview of the blind person the contents of the great book when the cost of the work in braille might be tremendous.

The reproducing instrument has the appearance of a small phonograph and is kept in a wooden case like a traveler's typewriter. The weight is 2 or 3 pounds. Like the phonograph there is a large circular disc about 9 inches in diameter. Above this disc is another disc, about the size of a six-inch record. This disc receives the typophone record. Connecting the two is a reduction gear. The "reader" places the record in position and fastens the needle on the sound boxes as in the ordinary phonograph. In order to begin reading the book he turns the large disc and the words of the story are then tapped out in the improvised code. The reduction gear causes the record to rotate at a rate one thirty-sixth as slow as the lower disc is turned. The operator may "read" as slowly or as rapidly as he desires merely by twirling the lower disc to suit his ability to comprehend the sounds.

Recognizing that a "reader" may

grow tired after perusing a few chapters Dr. Herz has contrived an ingenious "bookmark" that enables him to begin "reading" where he left off. A small clench inside the wooden case clamps the bar holding the needle in the place where the "book" is "closed."

200 Models of Machine Made.

The present model typophone is the 200th Dr. Herz has made. It hears all the improvements and is without the faults that were embodied in the 199 discarded models. His primary purpose in visiting the United States was to accept the invitation by those interested in having him demonstrate his invention. He hopes while here to interest individuals or organizations to take hold of his invention so that the machine and "books" may be placed at the disposal of the afflicted, for the cost of manufacture or without cost.

The inventor feels that if out of his own affliction there can come some good to the millions similarly situated the loss of his vision will not have been in vain. He is not interested in the commercial exploitation of typophonia and stands ready to turn it over without cost to the philanthropic individual or organization which will undertake to give it to the blind and weak-sighted out of humanitarian motives, free from any suspicion of commercialism.

It is the dream of Dr. Herz that there may eventually arise in the United States an International Institute for the Blind, with sections for all the nations. By the system of typophonia he is of the opinion that the world of literature, science and culture may be opened to the afflicted. Records, he says, can be made in all languages. As most of the blind are poor, he insists that his invention must be given free of cost or at cost.

Record in Three Languages.

Records have already been made by Dr. Herz in German, English and Polish. He was subsidized to a limited extent by the Austrian and Polish governments in his experiments. The first German records were Grimm's Fairy Tales and the first English record was Oscar Wilde's "The Happy Prince and other Tales."

Dr. Herz came to this country at the request of M. C. Migel, chairman of the New York state commission for the blind, William Ziegler, Jr., and W. G. Holmes, editor of the Matilda Ziegler Magazine. Representatives of the following organizations also sent letters inviting him:

The Red Cross Institute for the Blind, the National Committee for the Prevention of Blindness, the Association for the Instructors of the Blind, the American Association of Workers for the Blind, the Matilda Ziegler Publishing Company for the Blind, the New York Association for the Blind, the Perkins Institute for the Blind, the Librarian for the Blind, Library of Congress and the American Printing House for the Blind.

When Dr. Herz first took up the study of braille three years ago there was a shortage of thick paper in Austria, the sort used in printing braille characters. He thereupon invented a method of stamping the characters on any thickness of paper by means of perforated zinc steels. He made an inexpensive frame for the sightless persons use and by means of which he is able to print his own braille books at little expense.

In his medical specialty, heart disease, he has invented machines in connection with mechanotherapy. The apparatus bearing his name is said to be in use all over the world. A small pocket instrument for measuring blood pressure is among his inventions.

Dr. Herz is planning to sail for Europe on July 21. He will stop in London to visit Sir Arthur Pearson, the blind publisher. The physician's wife was born in New York, but she did not come with him. He was accompanied by a brother and his daughter, who have assisted him in his experiments.

SHOT DOWN 300 WOMEN

Villa, Unable to Find One Who Fired at Him, Ordered All Shot.

Three hundred women camp-followers attached to the Mexican government forces have been killed by the order of Francisco Villa, the bandit leader, according to a newspaper report.

The women were captured by Villa during an encounter, the paper says, and after their seizure, they were lined up and inspected to see whether there were any masquerading soldiers among them.

One woman fired twice at Villa but missed. Unable to locate her, Villa ordered the entire body of women herded together and shot down.

Baboons Prefer Cooked Food.

It is somewhat remarkable that, although a baboon in captivity will not eat raw meat unless extremely hungry. It will eat with avidity meat which has been cooked. Since the large extension of sheep farming and the consequent restriction of their natural food supplies, baboons in some parts have developed the habit of raiding flocks in the lambing season and tearing open the stomachs of the lambs for the sake of the milk which these contain. This practice has led to the virtual extermination of baboons over large areas. However, in justice to it should be noted that it is only when food is very scarce indeed that this criminal practice is indulged in.—Atlantic Monthly.

Fragrance of Rosewood.

Rosewood, the commercial name applied to a beautiful wood used for ornamental furniture, derives its name from the fact that when the tree is cut the fresh wood possesses a strong rose-like fragrance.

YOUR LAST CHANCE

To Become a Member of the



Single Dollar Club

THESE WERE ONLY 50 INSTRUMENTS IN THIS LUCKY LOT. BUT THEY HAVE BEEN GOING OUT OF HERE AT A RATE WHICH SPEAKS MUCH FOR THE GOOD SENSE OF THE PROPOSITION WE MADE TO THE PEOPLE OF GRANTS PASS. THERE ARE NOW BUT A FEW LEFT—WHICH WE ARE SELLING AT THE SAME UNPRECEDENTED TERMS:

Costs no more than the ordinary phonograph



\$1 Down on Phonograph
\$10 Worth of Your Favorite Records
Remaining Terms Easily Arranged

THINK OF WHAT ONE SINGLE DOLLAR BRINGS TO YOUR HOME LIFE! THINK OF SUMMER TWILIGHTS—AND THE SWEET TONED PATHE! THINK OF NEXT WINTER—AND THE PATHE AS YOUR MOST ENTERTAINING FIRESIDE COMPANION! THINK OF THE SOCIAL, CULTURAL AND EDUCATIONAL VALUE IT HAS FOR THE WHOLE FAMILY.

And do not hesitate now! This wonderful opportunity will not come again!

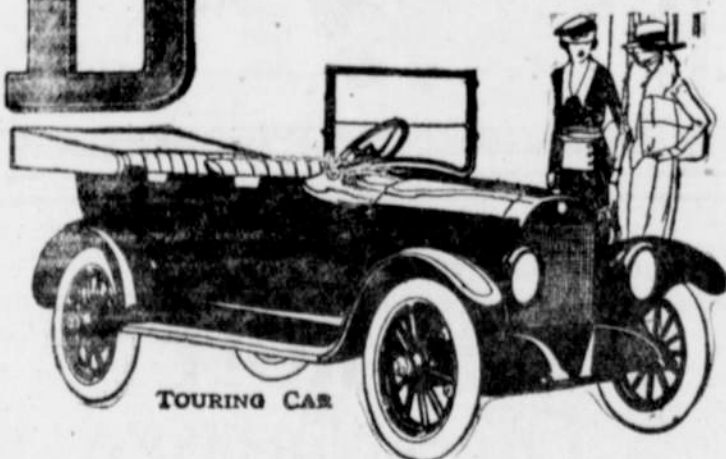
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At the Churches

Church of Christ

Services both morning and evening. Bible school at 10 a. m. Communion at 11 followed by sermon. Christian Endeavor at 7. Sermon at 8.

Mr. and Mrs. Drake, formerly of this church but now of Santa Rosa, Cal., are with us and Mr. Drake will speak for us both morning and evening. Come and worship with us. Make our home church your church home.

Catholic Church

Services will be held at the Catholic church on Sunday morning at 9:30 by one of the Medford priests who will be here in sufficient time before mass to attend to the wants of the congregation.

Baptist Church

Bible school at 10, classes and teachers for all ages. Morning service at 11, sermon by the pastor on "Follow Me."

B. Y. P. U. service at 7. Union service in the Presbyterian church at 8 o'clock. Mid-week service on Thursday evening at 8 o'clock.

A cordial invitation to all.

C. M. Cline, preacher.

Salvation Army

Sunday school 2 p. m. Holiness service 3 p. m., led by Chas. Thurman. Young people's meeting led by Josephine Edwards and Marie Macfarlane, 6:15. Salvation service at 8 p. m. Regular services Tuesday, Thursday and Saturday 8 p. m. Helping hand Thursday 2 p. m., for work. Everybody invited.

Envoy and Mrs. Gray in charge

Rothau Presbyterian Church
Sunday school 10 a. m.

Morning worship 11, "Our Daily Bread."

Evening union service at 8. Sermon by Rev. C. M. Cline of the Baptist church.

There will be no midweek services nor Sunday morning services until further notice.

Henry G. Hanson, minister.

First Church of Christ Scientist

Christian Science services are held every Sunday in the W. O. W. hall, at 11 a. m. Wednesday evening meeting at 8 o'clock. The subject Sunday is "Love."

Reading room is open from 2 to 4 p. m. daily except Sundays and holidays. The public is cordially invited to attend the services and to visit the reading room.

A Perfect Woman.

The measurements and description of the perfect woman, as approved by a New York sculptor, follow: Height, 5 feet 7 inches; weight, 147 pounds; wrist, 6½ inches; bust 36 inches; waist, 24½ inches; hips, 42 inches; thigh, 22 inches; knee, 17 inches; calf, 15 inches; ankle, 8 inches; size of glove, 6¼; size of shoe, 3¼; color of hair, chestnut brown; color of eyes, hazel.

Ancient Money.

The first coins used by the civilized nations of the ancient world were small metal ingots stamped with a ruler's seal. It is probable that they were first minted in Lydia, the rich Asian kingdom of which Croesus was the most famous king. The "punch marked" coins of India are assigned to a period older even than that of Buddhism.

Eternal Things.

The destruction of a dark star is its rebirth into life again. It is ground to dust in a swarm of meteors and star-stuff, and its remnants are recreated into a new system of sun and worlds. Matter is eternal, space is eternal, and time is eternal, and so far as can be learned, life is eternal also.—Chicago Tribune.

FOUGHT TO AVOID BATHS

Italian Immigrants Battled Valiantly Against Deputies.

To avoid taking the baths required under immigration laws, 2,000 Italians, brought to the United States on the White Star liner Canopic, engaged in a battle with United States deputies at Boston. No one was seriously hurt in the fight, and the immigrants finally lined up and took the required bath. The Canopic failed to clear properly at her port of sailing and was tied up at quarantine in Boston. The Italians became wildly excited when informed that baths must be taken and United States Marshal Duane found it necessary to press a half dozen deputies into service.

VICTORY MEDALS ARE READY

Distribution of Nearly Four Million Begun Among U. S. Army Men.

Distribution of the Victory medal for service in the United States army during the World war, from April 6, 1917, to November 11, 1918, has been begun, according to Secretary of War Baker.

The first of the 4,000,000 medals was given to President Wilson, as commander-in-chief of the army and navy. Applications for the medals are to be made to the nearest army post or a recruiting officer, the application stating to which of three classes of medal the applicant is entitled.

Dancer Seeks \$50,000 for Injured Knee
Tumbling into an open elevator shaft in a hotel at Baltimore, Md., Miss Nyma Sealbert, a dancer, of Hinton, W. V., skinned her knee so severely that, she said, it interfered with her dancing. She has therefore launched suit for \$50,000 against the proprietors.

Italians to Lose War-Made Fortunes.
War-made fortunes are to be confiscated in Italy, according to the announcement of a confiscatory decree, prepared by Premier Giolitti, at Rome.

Hammermill Bond Letter Heads and Envelopes at the Courier office.