

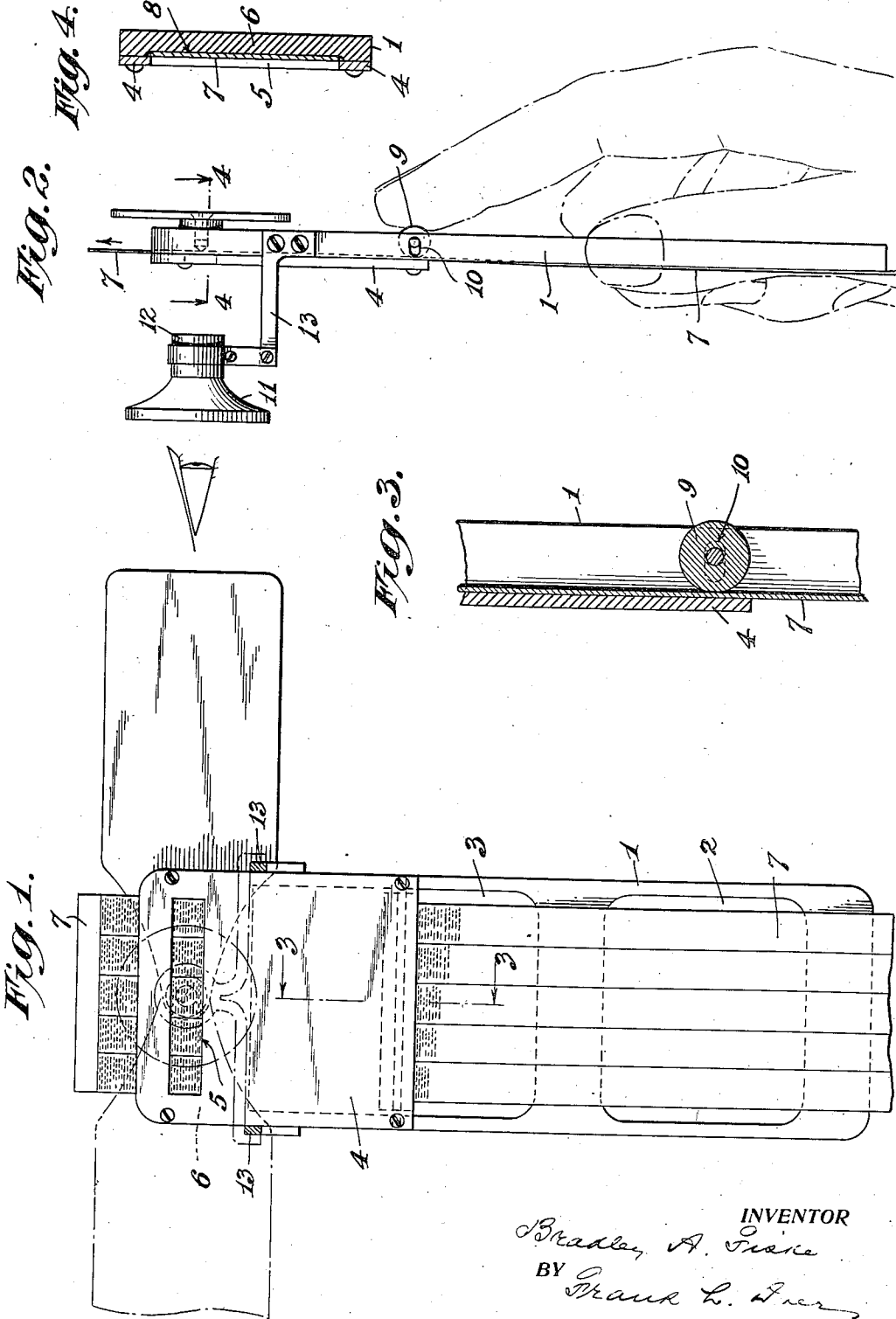
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READING MACHINE

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UNITED STATES PATENT OFFICE.

BRADLEY A. FISKE, OF WASHINGTON, DISTRICT OF COLUMBIA.

READING MACHINE.

Application filed January 30, 1922. Serial No. 532,866.

To all whom it may concern:

Be it known that I, BRADLEY A. FISKE, a citizen of the United States, residing at Washington, in the District of Columbia (whose post-office address is Stoneleigh Court, Washington, D. C.), have invented certain new and useful Improvements in Reading Machines, of which the following is a full, clear, and exact specification.

My invention relates to various new and useful improvements in reading machines, of the type disclosed in my Patent No. 1,411,008, dated March 28, 1922, wherein reading matter reduced to characters of microscopic size is carried in parallel columns on a strip or sheet, and is adapted to be brought successively into the field of view, a single lens being employed and adapted to be brought into line with the successive columns of characters.

The object of the invention is to improve the construction and operation of such reading machines. It particularly provides a blinder adapted to be moved to a position in front of one of the reader's eyes, whereby the other eye may be employed at the lens, thus allowing both eyes to be kept open during the reading operation, said blinder being preferably pivoted so as to be brought in front of either the right or left eye, and thus permitting the reader to use either eye for reading purposes. I find that by thus providing a device by which both eyes may be kept open and in which the reading may be done with either eye, the machine may be used with a minimum of muscular and optical fatigue. Furthermore by pivoting the blinder it may be moved into position parallel with the frame, so as to be out of the way when the device is not in use. My present improvements also provide improved mechanism for properly manipulating the strip or sheet to bring the characters successively into view, said mechanism being of simple construction, of effective operation and maintaining the strip or sheet always flat and accurately located in the optical field.

In order that the present improvement may be better understood, attention is directed to the accompanying drawings forming part of this specification, and in which—

Fig. 1 is a front elevation of my improved reading machine showing a strip of paper therein, with the microscopic characters

arranged in five columns, the lens being removed for purpose of clearness.

Fig. 2 is a rear elevation of the same.

Fig. 3, a vertical sectional view on the line 3—3 of Fig. 1, and Fig. 4, a section on the line 4—4 of Fig. 2.

In all of the above views, corresponding parts are represented by the same numerals.

The frame 1 is generally rectangular, being formed preferably of aluminum, so as to be as light as possible, and being cut away at 2 and 3 so as to further reduce weight. Secured to the front of the frame at its upper portion is a front plate 4, said plate being formed with an opening or slot 5 therein, long enough to include all the columns of characters and wide enough to include several lines of characters, the width being only limited by the effective field of the lens. Ordinarily, the width of the slot 5 is substantially equal to the width of one of the columns of characters.

Behind the front plate 5 is located a frame section 6 and between the two extends the paper strip or sheet 7 having the microscopic characters thereon in parallel columns. The channel 8 in which the strip passes may be formed either in the section 6 or plate 4, preferably the former, this channel permitting the strip to be fed upwards freely, while at the same time keeping it perfectly flat behind the slot 5 and in the optical field of the lens. To feed the strip 7, I employ a small roller 9 covered preferably with rubber or similar material, which bears against the strip to feed it frictionally, when said roller is rotated by the finger, as indicated in Fig. 3. Preferably the bearings 10 for the feed roller are a little elongated to permit the roller to move slightly toward and away from the strip, whereby the pressure of the finger in rotating the roller will also squeeze the roller in close contact with the strip to give the needed friction. The strip may be introduced into the machine either downwardly or upwardly into the channel 8, and extends between the front plate 4 and roller 9, and along the front of the frame, as shown in Fig. 1.

A lens 11 may be supported in any suitable way, but preferably by a holder 12 on a frame 13, and as described in my application filed November 20, 1920, the lens is not only adjustable within its holder to se-

cure the proper focus, but the holder is adjustable across the frame to bring the lens into line with the desired column of characters.

5 Pivoted centrally to the frame section 6 is a sheet metal blinder 14. This blinder may be swung to a horizontal position, either to the right or left and held in its position by friction. By means of this blinder, both
10 eyes of the reader may be kept open; and by changing its position from one side to the other, the reader may change from one eye to the other in case of fatigue. When this blinder is in a midway position parallel with
15 the frame 1, the device will be sufficiently compact to carry in the pocket, being no larger than some forms of spectacle cases.

Having now described my invention, what I claim and desire to secure by Letters Patent, is:

20 1. In a reading machine, the combination of a frame, a front plate secured to the frame, and between which and the frame is arranged the strip or sheet carrying the
25 reading matter, said front plate being formed with a slot through which the read-

ing matter will be observed, a lens supported by the frame for viewing the reading matter through said slot, and means for feeding the strip or sheet to move the reading matter with respect to the lens, substantially as set forth. 30

2. In a reading machine, the combination of a frame, a front plate secured to the frame and between which and the frame is
35 arranged the strip or sheet carrying the reading matter, said front plate being formed with a slot through which the reading matter will be observed, a lens supported by the frame for viewing the reading matter
40 through said slot, and a friction roller adapted to be turned and simultaneously pressed into frictional engagement with the strip or sheet for moving the reading matter with respect to the lens, substantially as
45 set forth.

This specification signed and witnessed this twentieth day of January, 1922.

BRADLEY A. FISKE.

Witnesses:

A. J. FRITZ,
A. W. MELCHER.