

C. L. DAVIS.  
TRACKER BOARD.  
APPLICATION FILED JAN. 6, 1910.

998,877.

Patented July 25, 1911.

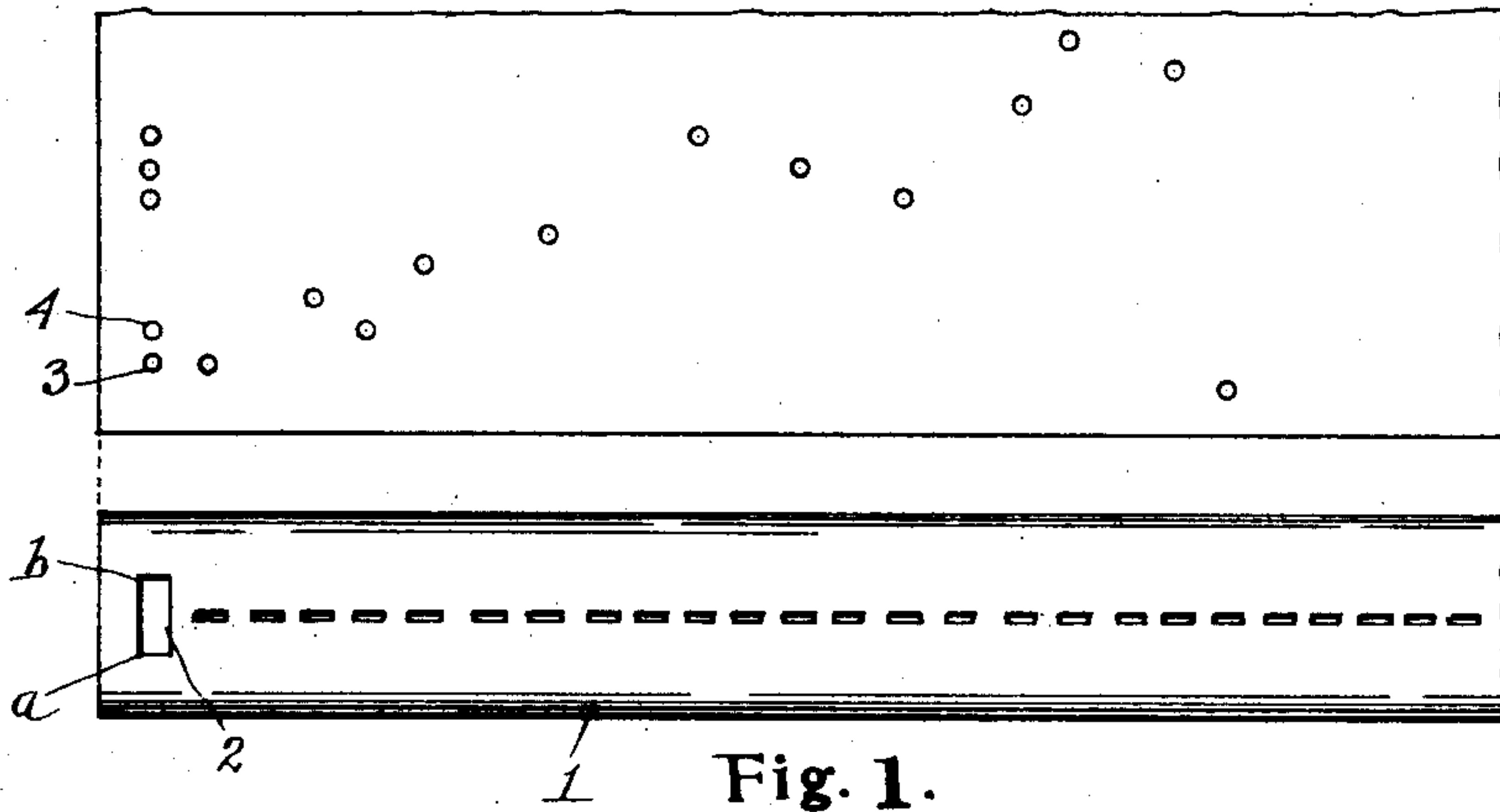


Fig. 1.

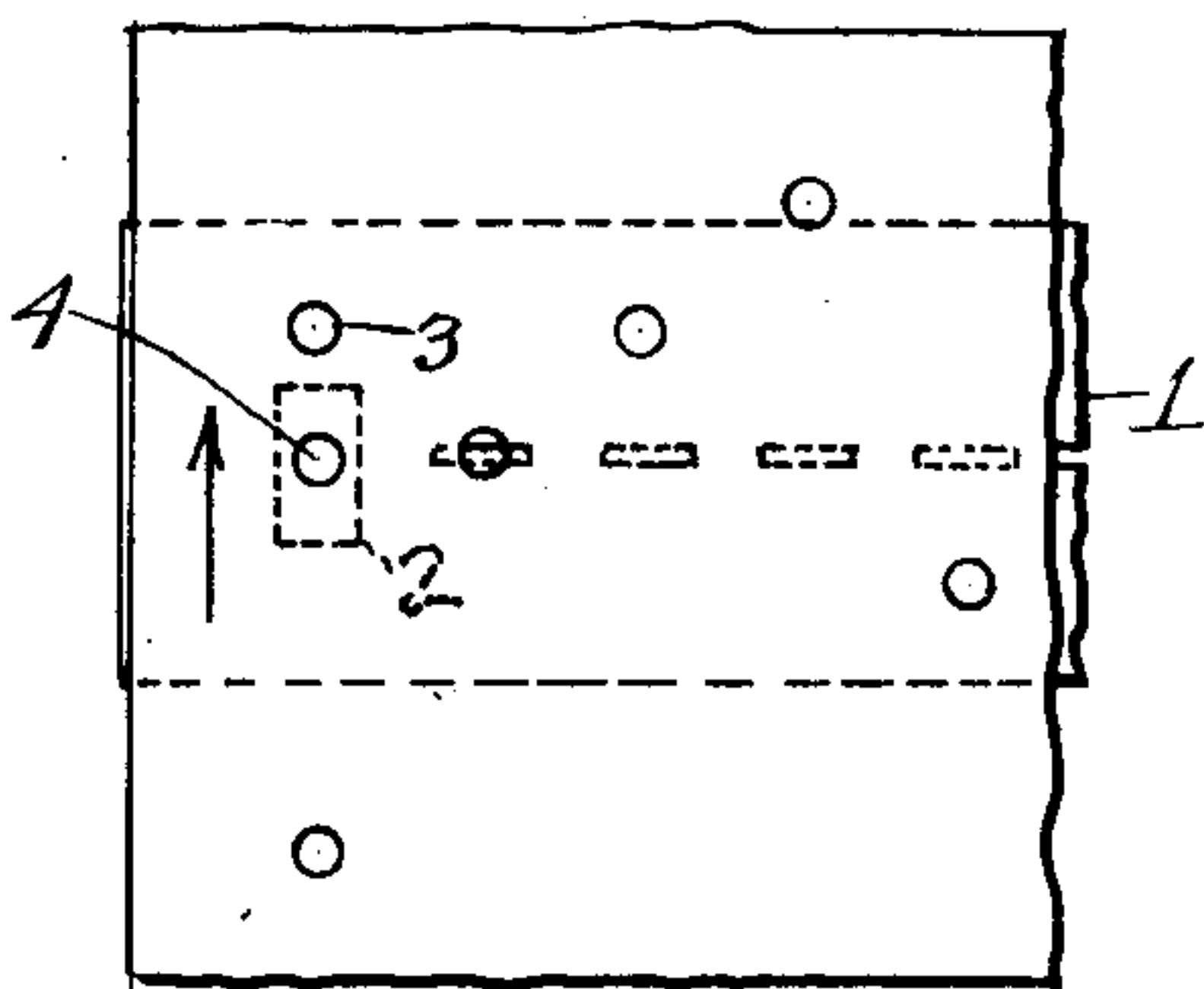


Fig. 2.

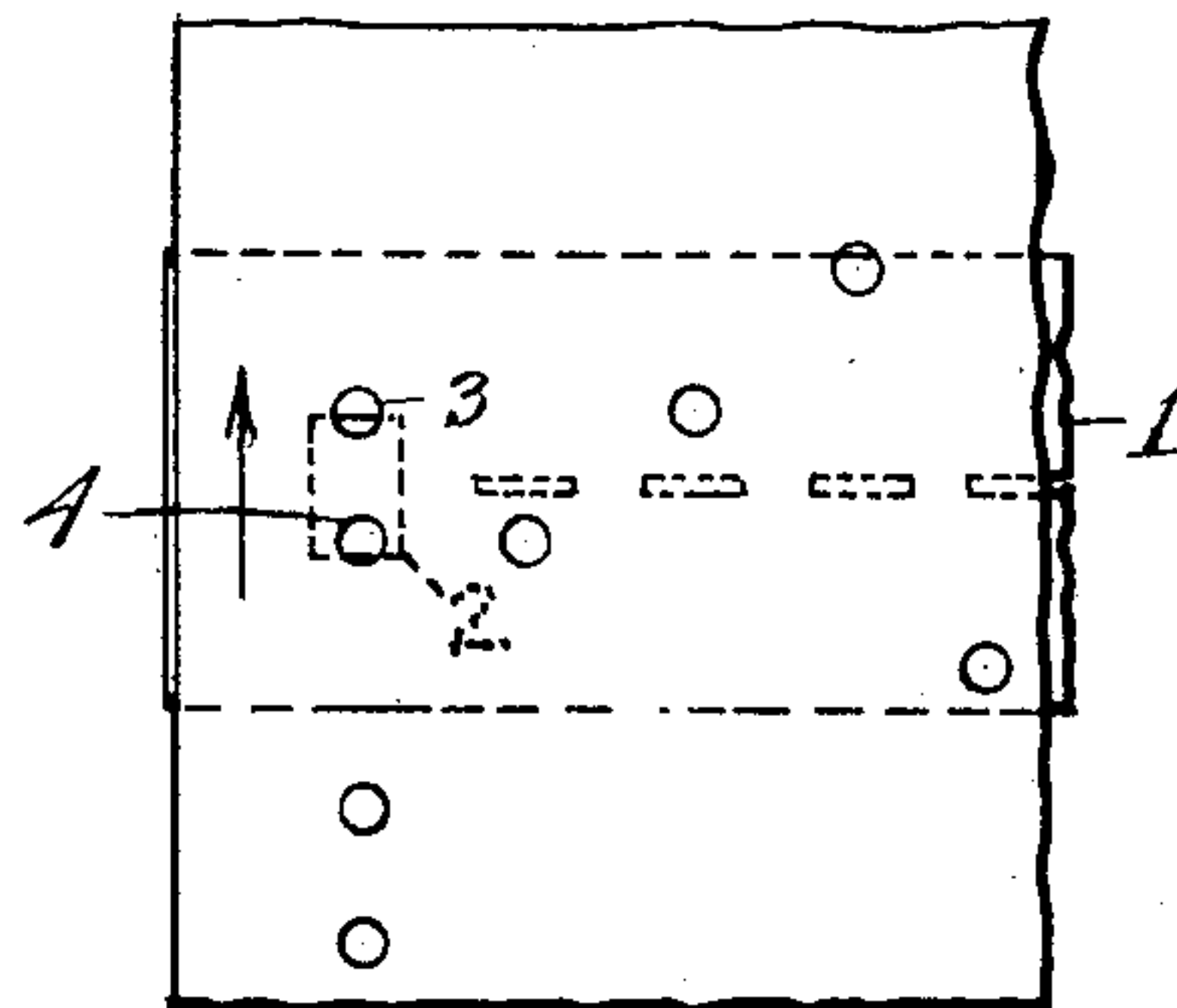


Fig. 3.

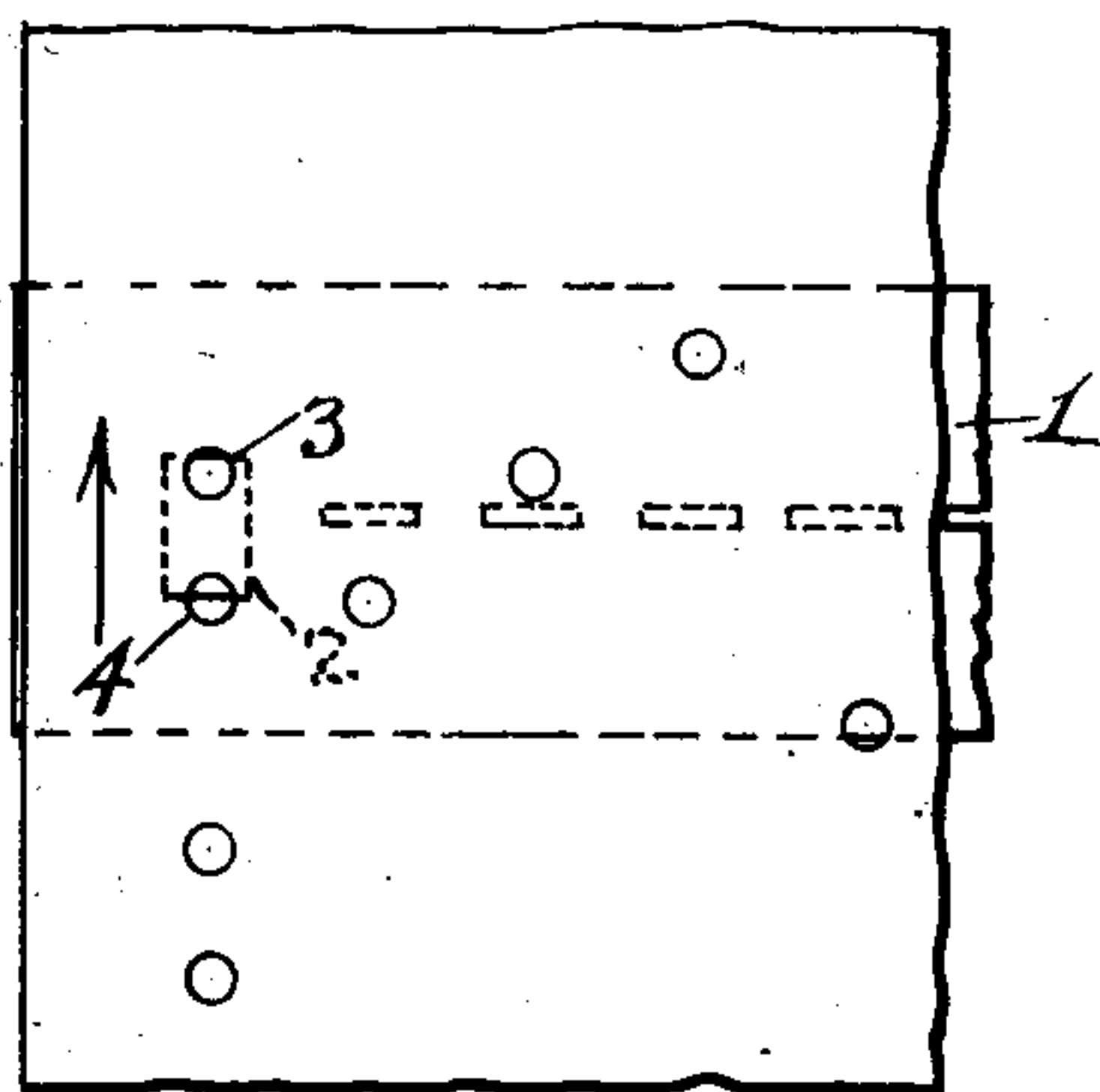


Fig. 4.

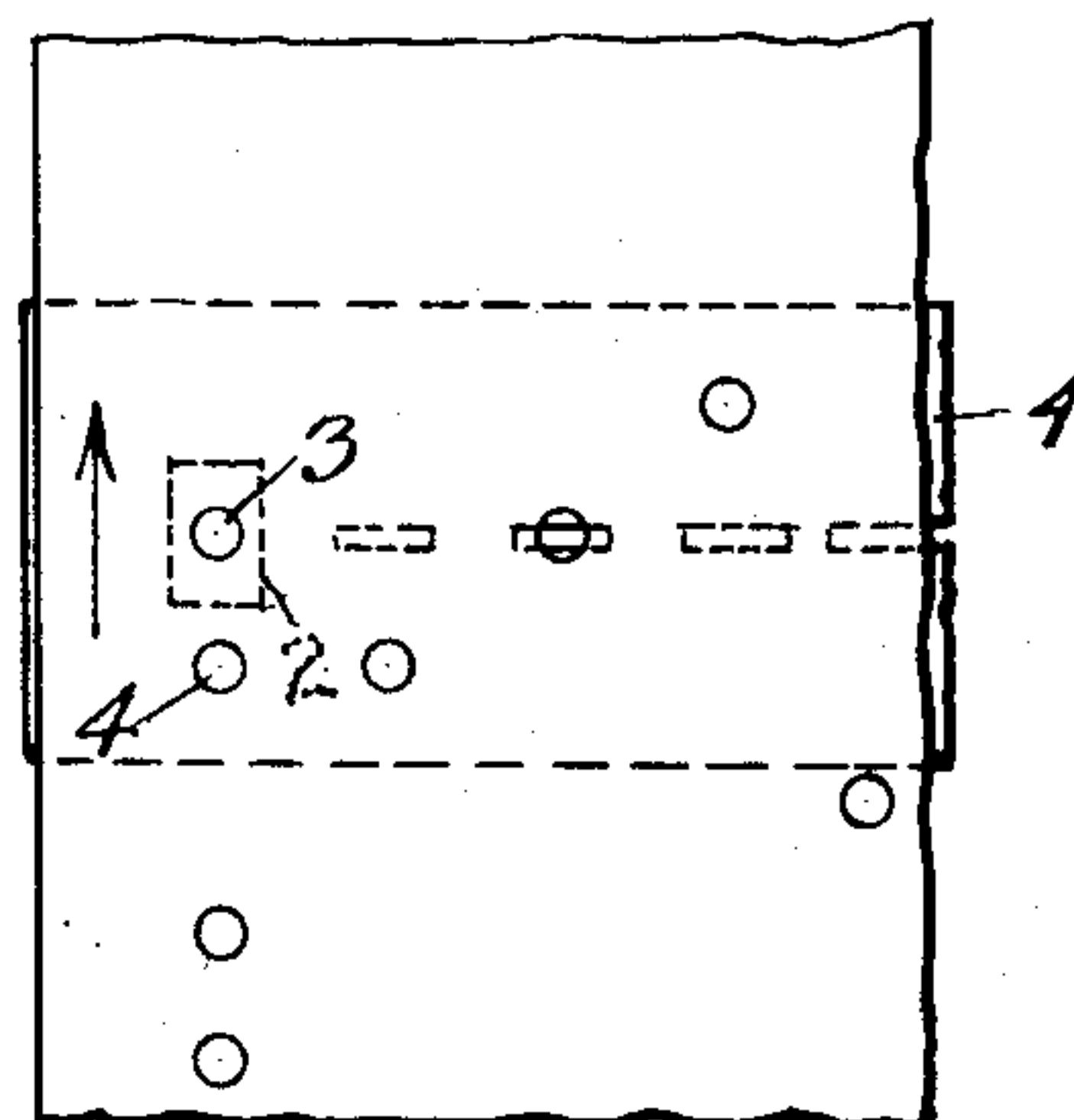


Fig. 5.

Witnesses

*O. B. Baenziger*

*Vera Pillman*

Inventor

*Charles L. Davis*

By

*Parker & Burton*

Attorneys

# UNITED STATES PATENT OFFICE.

CHARLES L. DAVIS, OF DETROIT, MICHIGAN.

## TRACKER-BOARD.

998,877.

Specification of Letters Patent. Patented July 25, 1911.

Application filed January 6, 1910. Serial No. 536,607.

*To all whom it may concern:*

Be it known that I, CHARLES L. DAVIS, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Tracker-Boards, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to pneumatic actuated machines of that character in which a tracker board is used in connection with a perforated sheet of paper as the valve structure which controls the inlet of the primary air that inaugurates the movement of the mechanism.

It has for its object a tracker board provided with one or more openings of extra large size or capacity, which large openings act in conjunction with the perforations in the sheet of paper to produce a long-continued flow of air, instead of the intermittent flow of air which occurs with the use of the ordinary perforated sheet and the ordinary tracker board.

In the drawings:—Figure 1, is a front elevation of the tracker board, and a portion of the perforated sheet of paper. Fig. 2, is a diagram indicating the position of the paper over the tracker board with a hole through the paper central over a large opening through the tracker board. Fig. 3, is a diagram showing the paper with the hole in the tracker board centrally disposed, or nearly centrally disposed, between two holes, both of which are overlapped. Fig. 4, is a diagram showing the perforated paper quite similarly located with respect to the hole in the tracker board to the position shown in Fig. 3, except that the second or lowermost perforation is shown as just entering its position of registry with the tracker board hole. Fig. 5, shows the paper in the same position as Fig. 2, except that it is one full step behind the position there shown.

In the use of perforated sheets with tracker boards of ordinary construction to produce a long-continued flow of air, as is sometimes necessary, it has been found necessary to punch or cut the holes in the form of a long slot, continuous in length to an extent sufficient to produce the desired length of flow of air. This weakens the

paper valve member along the line of the holes, especially if the line of holes is near the edge of the paper, as is frequently, if not usually, the case, and this part of the paper is apt to get out of its proper track and either tear the paper or catch and clog. To overcome this, I make a tracker board 1, which has the openings of the usual size extending almost completely thereacross, and with a large opening 2, which extends across the tracker board along the line from *a* to *b* for a distance greater than the distance between two consecutive holes 3 and 4 on the paper valve member. The extent of the holes of the tracker board should be sufficient to enable the paper, when traveling over the hole 2, to bring the hole 4 into engagement therewith before the hole 3 has entirely left its engagement with the hole 2 in the tracker board. When so constructed, the continuity of the paper of the valve member is not broken through a longer extent than the diameter of the single hole, but its effective action is the same as though there was a continuous slot extending through the entire length of the paper where the consecutive holes are punched closely enough together to produce the desired result.

This form of tracker board is particularly useful in machines that are employed to actuate typewriters for the purpose of actuating what may be called the tabulating part of the typewriter, including, of course, the insets at the beginning of paragraphs, blank spaces in lines, and similar places where it is desired to repeat the actuation of the spacer a large number of times. It is also useful in musical instruments for actuating pedals and other parts of the instrument. The desired gaging and timing for each musical selection can be effected by proper relative spacing of the small holes in the paper.

What I claim as new is:—

1. In combination with a perforated valve sheet, a tracker board having a plurality of air inlet openings of varying length spaced therealong, the smaller openings being adapted to be spanned by individual perforations of uniform size in the traveling paper valve member, and to be entirely covered by the unperforated portion of the sheet between the occurrence of the perforations, and the larger opening being adapted to maintain registry with one of the perfora-



tions in the paper valve member, by its extent along the path of travel thereof, until a succeeding perforation of the same note-producing value has come into registry with  
5 it, thereby maintaining a continuous flow of air therethrough for the desired period of time, substantially as described.

2. In combination with a tracker board having a plurality of holes of varying  
10 length, a traveling perforated sheet adapted to travel thereover, and, by the registry of its perforated portions with the longer of said holes, to permit the continuous passage

of air blasts therethrough, some portion of the length of each of said holes being adapted to maintain registry with one of a repeated series of perforations of the same  
15 note value until a succeeding perforation has moved into registry therewith, substantially as described.

In testimony whereof, I sign this specification in the presence of two witnesses.

CHARLES L. DAVIS.

Witnesses:

CHARLES F. BURTON,  
VIRGINIA C. SPRATT.

---

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

---