

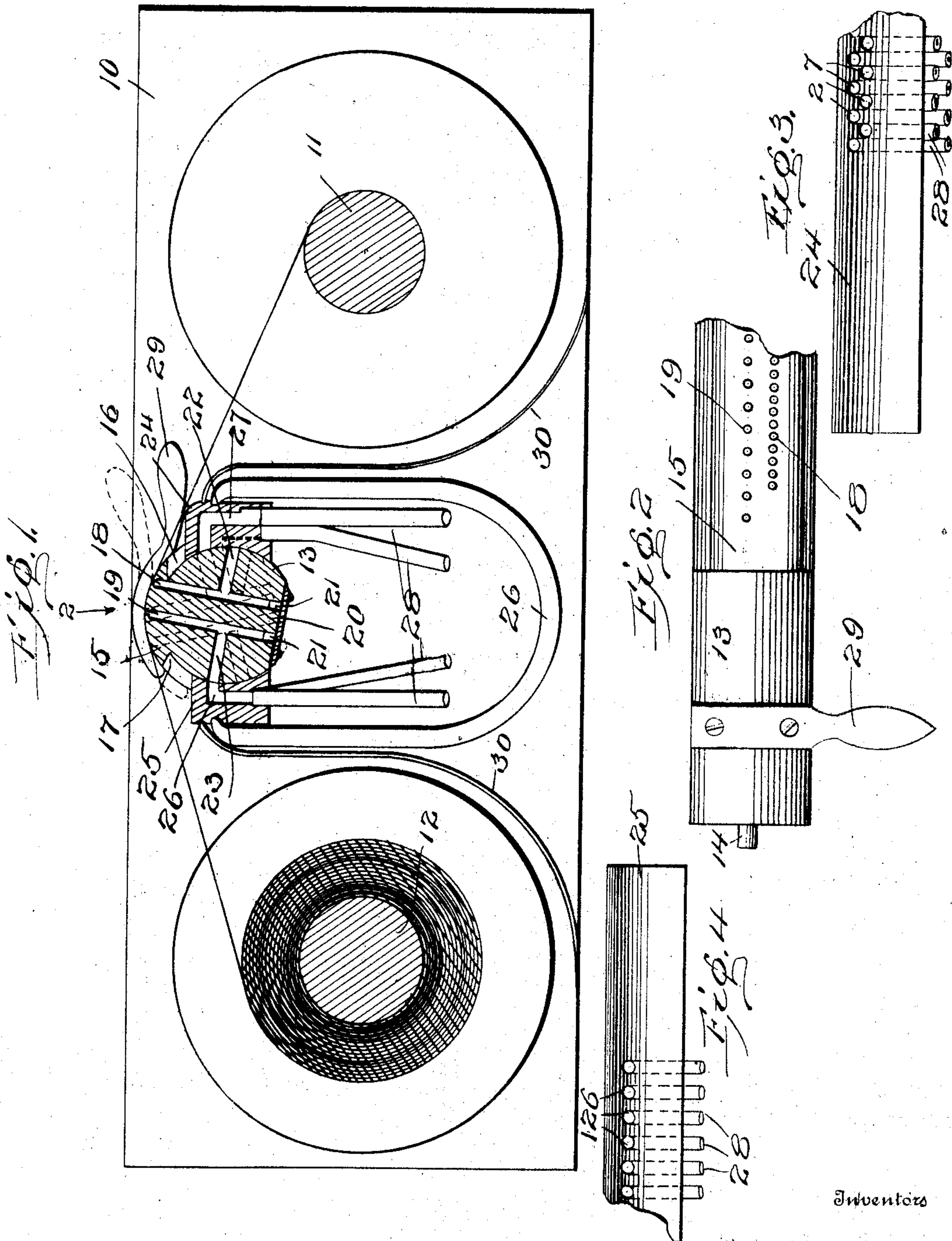
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J. HATTEMER & A. KUHLE,

TRACKER BAR.

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UNITED STATES PATENT OFFICE.

JUSTUS HATTEMER AND ARTHUR KUHLE, OF WEST NEW YORK, NEW JERSEY, ASSIGNORS
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TRACKER-BAR.

No. 881,317.

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To all whom it may concern:

Be it known that we, JUSTUS HATTEMER and ARTHUR KUHLE, citizens of the United States, residing at West New York, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Tracker-Bars; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to tracker bars for self-playing musical instruments, and has for an object to provide a tracker bar adapted for use with music sheets of different compasses, and embodying improved features of novelty, convenience and accuracy.

A further object of the invention is to provide in a tracker bar improved means for moving into and out of operative position the various series of holes or openings employed in association with the music sheets.

A further object of the invention is to provide a rotatable tracker bar and with improved covering and registering means adapted to register with openings formed in the said bar.

With these and other objects in view, the invention comprises certain novel constructions, combinations and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings:—Figure 1 is a transverse sectional view taken perpendicular to the axis of the tracker bar and the music rolls. Fig. 2 is a fragmentary top plan view of the tracker bar as taken on arrow 2 of Fig. 1. Fig. 3 is a view in side elevation of the port covering member upon one side of the bar. Fig. 4 is a view in side elevation of the port covering member upon the side opposite that shown in Fig. 3.

Like characters of reference designate corresponding parts throughout the several views.

The improved tracker bar forming the subject-matter of this application is mounted in a self-playing musical instrument or a music instrument player, by the employment of the usual and ordinary or conventional cheek plate 10, between which are mounted the rolls 11 and 12, the former of which is preferably the rewind spool and the latter

the takeup spool, although such spools may be interchanged, if found desirable.

Between the spools 11 and 12, the tracker bar 13 is journaled in any approved manner as by the employment of the trunnions 14 extending into an opening in the cheek plate so that the axis of the tracker bar is substantially parallel with the axes of the spools 11 and 12.

The tracker bar 13 may be cylindrical in cross section but is preferably cylindrical throughout the greater portion of its extent circumferentially, and with an off-set portion 15 formed thereon defining grooves or notches 16 and 17. Through the tracker bar, preferably upon opposite sides of a diametrical line, openings 18 and 19 are produced, the outer or operative ends of such openings transecting the off-set portion 15 and the rearward or inner ends of such openings being closed in any approved manner as by the employment of a plate 20 and the plugs 21 or either of such means of closure independently. Communicating with such openings 18 and 19 other openings or passages 22 and 23, respectively, are formed preferably at substantial right angles to the openings 18 and 19, and the former 22 being in staggered relation to permit the formation of a sufficient number of such openings in the length of the tracker bar.

Upon opposite sides of the tracker bar two closure members 24 and 25 are employed having concave faces corresponding substantially with the curvature of the tracker bar and maintained in intimate relation with the said tracker bar by means of one or more springs 26 formed in any approved manner but preferably as shown substantially U-shaped with the extremities engaging the opposite closures 24 and 25. The closure 25 is provided with a series of openings 126 arranged longitudinally thereof and within the concave side to register with the openings 23 of the tracker bar. The closure 24 has openings 27 preferably produced in staggered relation, as shown in Fig. 3, to register with the openings 22 produced in staggered relation in the tracker bar 13. The openings 27 are formed in the concave surface of the member 24 in the same manner that the openings 126 are formed in the concave face of the member 25. Communicating with the openings 126 and 27 are a plurality of

flexible tubes or hose 28 leading from the members 24 and 25 to the action.

The openings 19, 23 and 126 are designed to be used in association with music sheets having a compass of sixty-five holes, while the openings 18, 22 and 27 are designed to be used in association with music sheets having a compass of eighty-eight holes. It is well known that the music sheets now in use employing an eighty-eight hole compass are narrower than the sixty-five hole music so that the holes 18 and 27 must be nearer together than the holes 19 and 126. For this reason the holes 22 and 27 are formed in staggered relation to permit the use of a sufficient number of holes of the requisite capacity in the length of the tracker bar and closure member 24.

For rotating the tracker bar 15 any approved means is provided as the handle 29 secured at or adjacent one end of the said tracker bar and convenient to the hand of the operator.

Diaphragms or partitions 30 are also preferably interposed between the tracker bar and the spools inclosing the springs 26, tubes 28 and other features from view and from contamination by dust and other extraneous matter.

With the device disposed as shown in Fig. 1 the tracker bar is in position to be operated in conjunction with sixty-five hole music, the openings 19 being upon the top of the tracker bar and communication through the said openings and openings 23, 126 and tubes 28 being had with the action. When eighty-eight hole music is to be employed the tracker bar is moved as indicated in dotted lines, bringing the holes properly at the top of the bar, communication then being had through the openings 18, passages 22 and 27, and tubes 28 with the action.

What we claim is:—

1. In a device of the class described, a rotatable tracker bar, openings formed in the said bar, closure members disposed upon opposite sides of the bar and provided with ports adapted to register at times with the openings of the tracker bar, and means facilitating the movement of the tracker bar.

2. In a device of the class described, a tracker bar, provided with a plurality of se-

ries or openings adapted to register with openings of a music sheet, a similar number of openings formed through the opposite sides of the tracker bar and in communication with the first mentioned openings, closure members disposed upon opposite sides of and in engagement with the tracker bar and each having openings formed therein positioned to register with one of the sets of openings.

3. In a device of the class described, a tracker bar provided with a plurality of series of openings at its forward side, a like number of openings formed upon opposite sides of the tracker bar and communicating with the first-mentioned openings, closure members in engagement with the opposite sides of the tracker bar and provided with openings and so positioned that the openings of one closure member register with the openings at one side of the tracker bar while the openings of the opposite closure are out of register.

4. In a device of the class described, a tracker bar presenting segmental surfaces upon opposite sides and having openings from said opposite sides to the front of the bar, closure members disposed upon opposite sides in engagement with the segmental surfaces and provided with openings, and means for facilitating the movement of the tracker bar to bring the openings of either side into register with the openings in the closure member upon that side.

5. In a device of the class described, a tracker bar presenting convex opposite surfaces, openings formed in the convex surfaces and communicating with openings in the front of the bar, closures having concave faces in engagement with the convex surfaces and having openings positioned to register at times with the openings in the convex surfaces, and means facilitating the rotary movement of the bar.

In testimony whereof we affix our signatures in presence of two witnesses.

JUSTUS HATTEMER.
ARTHUR KUHLE.

Witnesses:

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