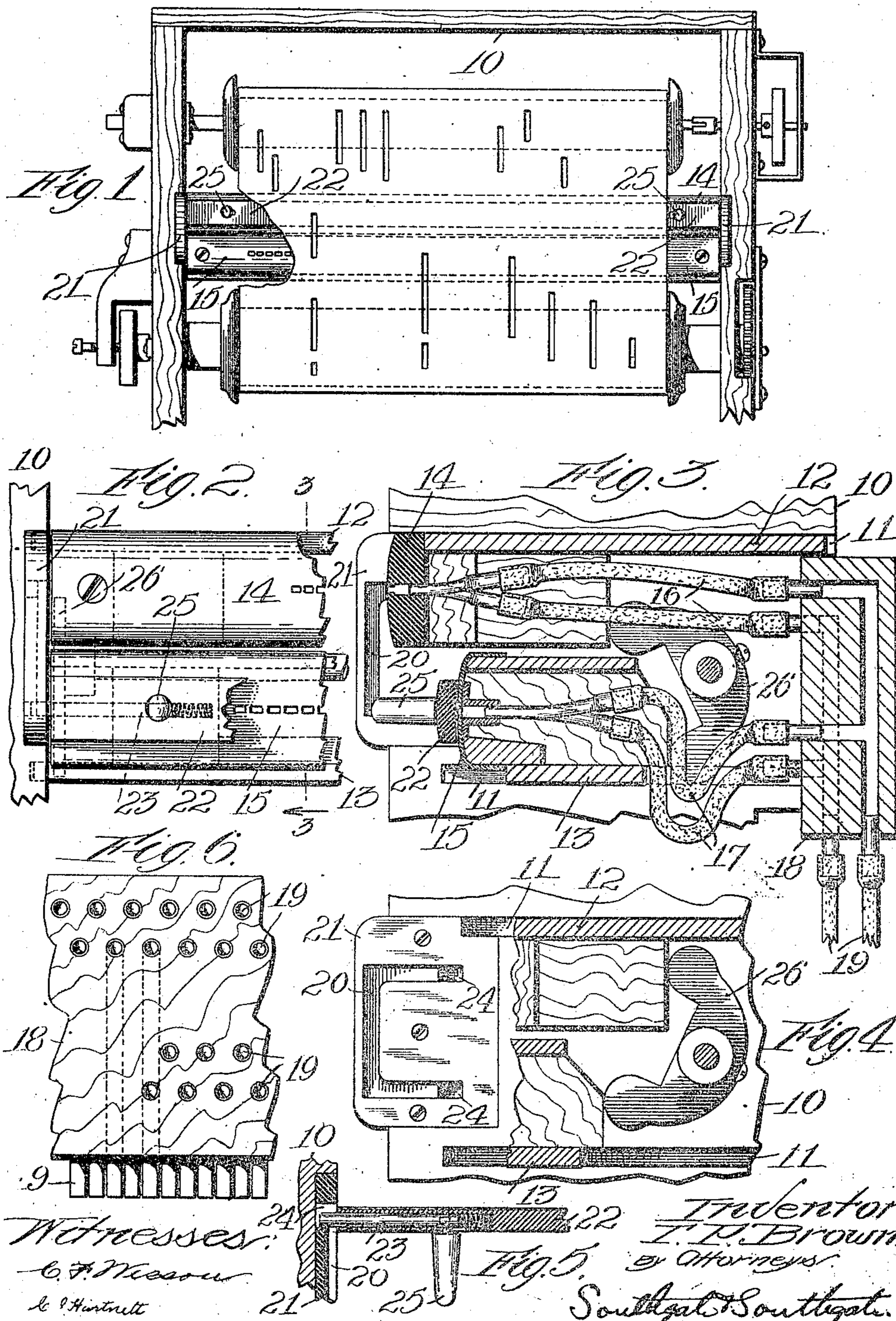


T. P. BROWN.
DOUBLE TRACKER MECHANISM.
APPLICATION FILED AUG. 13, 1908.

919,317.

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UNITED STATES PATENT OFFICE.

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DOUBLE TRACKER MECHANISM.

No. 919,317.

Specification of Letters Patent.

Patented April 27, 1909.

Application filed August 13, 1908. Serial No. 448,306

To all whom it may concern:

Be it known that I, THEODORE P. BROWN, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Double Tracker Mechanism, of which the following is a specification.

This invention relates to that class of pneumatic musical instruments in which a perforated note sheet controls the operation by passing over a tracker, and more specifically to that form in which two or more trackers are employed to permit the use of note sheets perforated for playing different numbers of notes. I am aware that several forms of mechanism have been devised for this purpose, but the principal objects of this invention are to provide a construction in which the trackers shall have a simple movement, in which the mechanism shall be simple and effective, and in which there will be no complicated mechanism to keep in order, to provide a single cap movable so as to cover the channels of the idle tracker, and move it back, to provide a guide therefor, and a lock on the cap for holding both trackers, one in operative and the other in inoperative position, to provide simple means in the tracker box whereby the motion of either tracker will cause the other to move oppositely, and generally to improve and simplify this class of musical instruments.

Reference is to be had to the accompanying drawings in which,

Figure 1 is a front view of a tracker box showing one way in which this invention may be applied thereto. Fig. 2 is a fragmentary front view on an enlarged scale. Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 2. Fig. 4 is an inside end view partly in section, with parts of the trackers removed. Fig. 5 is a sectional view of the tracker cap and associated parts, and Fig. 6 is a front view of a channel board at the rear of the trackers.

This invention is shown as applied to a tracker box 10 which has parallel horizontal ways 11 thereon for receiving and guiding plates 12 and 13 projecting from two trackers 14 and 15 so that the latter may reciprocate. The plate 12 on the upper tracker 14 extends to the rear of the box and forms a cover for the rest of the mechanism in all its positions. The trackers may be of any desired construction, two forms being shown.

They are provided with different numbers of note channels, connected by flexible tubes 16 and 17 with tubes fixed in a channel board 18 which has channels 19 connected with the action. As there are more of one set of tracker channels than of the other, all those of the larger set are connected with their respective channels 19, and the other set are connected with those of the channels 19 which correspond to the notes they represent, as will readily be understood.

Located on the inner sides of the walls of the tracker box are guide grooves 20, preferably formed in removable metal plates 21, set into the sides. A cap 22 for the trackers is mounted between these grooves and is provided with end pins 23 by which it is guided to move along the grooves. Both of the pins 23 are reciprocable and spring pressed and the grooves have notches 24 at each end to receive them, so located that when the cap is moved back toward the rear, the pins will enter the notches and automatically lock the cap in position. The grooves are shown as of a U-shape, the two legs thereof being in line with the direction of motion of the respective trackers. The cap is manipulated by two handles 25, fixed to the pins 23, so that the cap can readily be unlocked and drawn out. The cap also is used to move the trackers simply by pressing it inwardly against one of them. This results in moving both trackers, as the one forced in, moves the other out, through a pivoted member 26, which is located in the box and engages the rear ends of both trackers. Its operation will be obvious. It is to be observed that the automatic locking of the cap also causes both trackers to be locked or fixed in position.

While I have illustrated and described a preferred form of the invention, I am aware that many modifications may be made therein without departing from the scope of the invention as expressed in the claims, therefore, I do not wish to be limited to all the details shown, but

What I do claim is:—

1. The combination with a plurality of movable trackers, of a cap therefor, and a guide for guiding the cap from one tracker to another.

2. The combination with a plurality of movable trackers, of a cap therefor; a guide for guiding the cap from one tracker to another, and means whereby when the cap is

pressed against one tracker, the other tracker will move outwardly.

3. The combination with a plurality of movable trackers, of a cap therefor, a guide for guiding the cap from one tracker to another, means whereby when the cap is pressed against one tracker, the other tracker will move outwardly, and means for automatically locking the cap at its extreme position, whereby both trackers will be locked in their extreme positions.

4. The combination with two movable trackers, of a cap therefor, means for guiding the cap from one tracker to the other, and means for automatically locking the cap when it reaches either extreme position.

5. The combination with two movable trackers, of a cap therefor, means for guiding the cap from one tracker to the other, means for automatically locking the cap when it reaches either extreme position, said locking means comprising a spring pressed bolt on the cap, and a handle therefor projecting from the front of the cap by which the cap may be manipulated.

6. The combination with a movable tracker of a cap therefor and means on the cap for locking the tracker.

7. A tracker box having a tracker, guides

on the sides of the box, and a cap for the tracker movable along said guides.

8. A tracker box having guides on the sides thereof, a cap for a tracker movable along said guides, and two movable trackers, with each of which said cap is adapted to engage.

9. The combination of two slidable trackers, a cap for closing the channels of either tracker, and means whereby the pushing in of one tracker will force the other out into operative position.

10. The combination of a tracker box having grooves in its inner walls, two reciprocating trackers adjacent to the grooves, a tilting member in the box engaging both trackers, and constituting means whereby when one tracker is pushed in the other will be forced out into operative position, a cap movable along said groove to cover either of the trackers, and means for locking the cap against either tracker when pushed in.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

THEODORE P. BROWN.

Witnesses:

ALBERT E. FAY,
MARY E. REGAN.