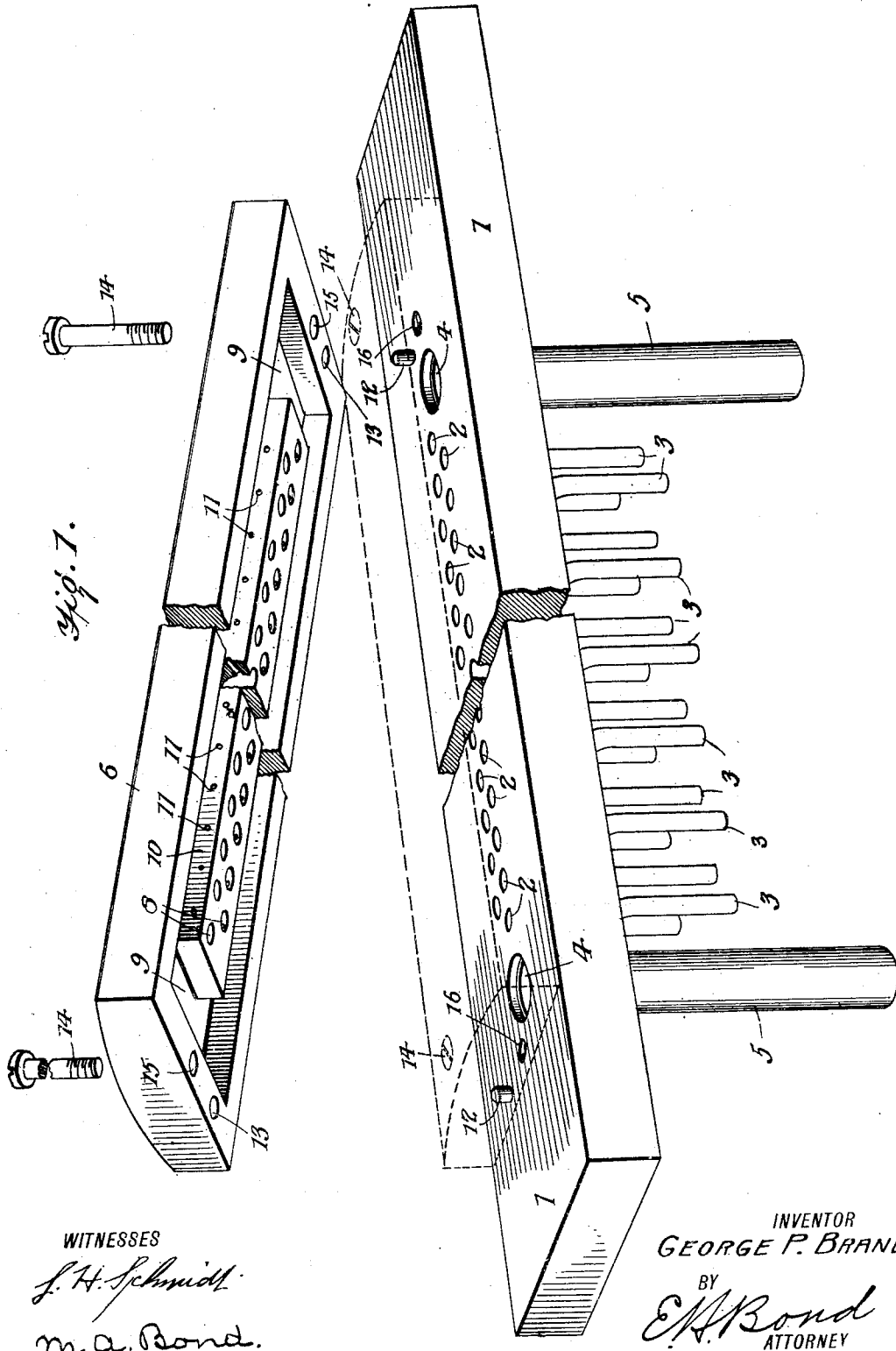


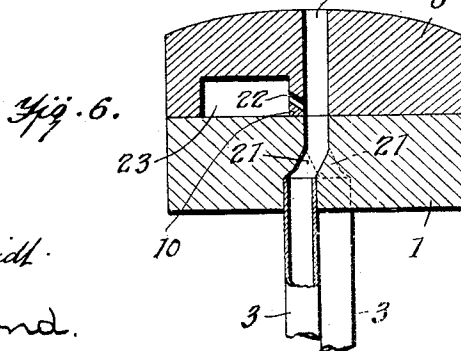
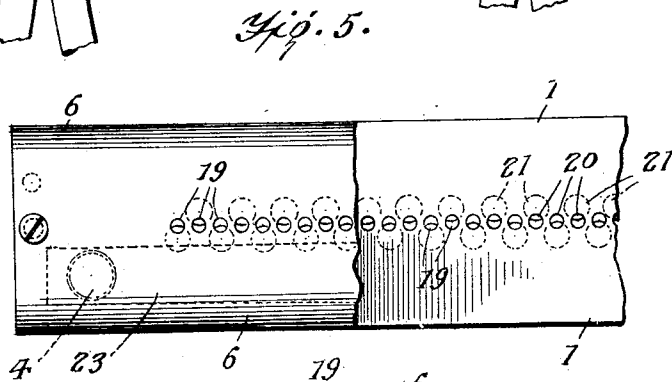
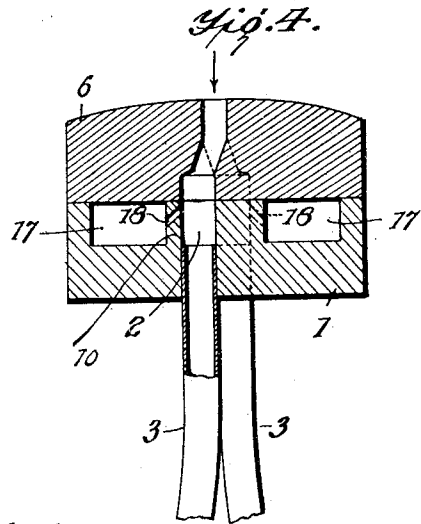
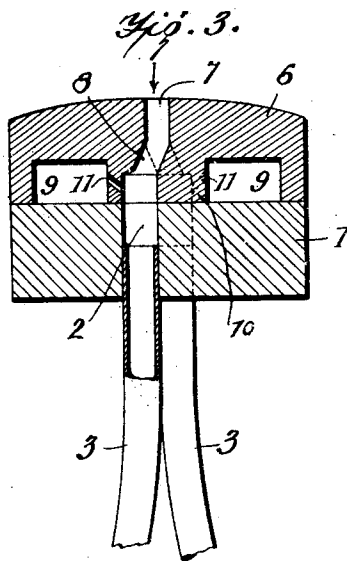
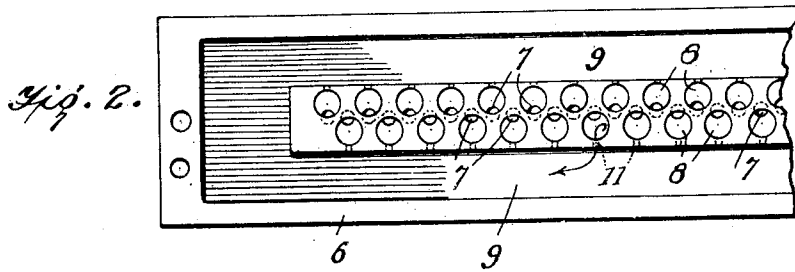
958,470.

G. P. BRAND.
TRACKER BAR.
APPLICATION FILED APR. 7, 1909.

Patented May 17, 1910.
2 SHEETS—SHEET 1.



958,470.



WITNESSES
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UNITED STATES PATENT OFFICE.

GEORGE P. BRAND, OF NEW YORK, N. Y.

TRACKER-BAR.

958,470.

Specification of Letters Patent.

Patented May 17, 1910.

Application filed April 7, 1909. Serial No. 488,341.

To all whom it may concern:

Be it known that I, GEORGE P. BRAND, a citizen of the United States of America, and resident of New York, in the county and State of New York, have invented certain new and useful Improvements in Tracker-Bars, of which the following is a specification.

This invention relates to what are known in the art as "bridges" or "tracker-bars" in pneumatic apparatus, such as piano and other musical instrument players in which a perforated music sheet is employed.

The present invention has for its object among others to provide an improved form of tracker-bar in which the bleed holes are made accessible for cleaning or for regulation as to size. The bleeds are disposed adjacent the face portion of the "bridge" or "tracker-bar" where they are easily accessible by removal of the cap or face piece.

The invention is capable of embodiment in a variety of forms, some of which only I have chosen to herein illustrate.

The invention, in such preferred forms, is clearly shown in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view, with parts broken away, showing my improved tracker-bar, the cap or face piece being shown as removed by full lines and indicated in position by dotted lines. Fig. 2 is a bottom plan of a portion of the cap piece or face removed. Fig. 3 is a cross section through the tracker-bar. Fig. 4 is a similar view through a modified form of the tracker-bar. Fig. 5 shows in top plan with portions broken away, still another form of embodiment of the invention. Fig. 6 is a cross section through the form shown in Fig. 5.

All of the views are enlarged beyond the normal size of the tracker bar, for the purpose of better illustration.

Like numerals of reference indicate like parts throughout the several views.

It is to be understood that the invention is applicable to tracker-bars of any desired length, or number of holes, the tracker-bar being made to accommodate a relatively large number of note-holes in a given length, and the invention is in no wise to be construed as restricted to a tracker-bar of any given number of notes to the inch.

Referring first to Figs. 1, 2 and 3, 1 designates the bed or tube support having in its upper face the ducts 2 which, in this instance, are shown as staggered and having leading therefrom the conduits 3 of ordinary construction and for the usual purpose.

4 are openings in this bed or tube support with which communicate the conduits 5 which are designed to lead to the tension chamber or action of the player.

6 is the cap or face. It is provided with the desired number of note-holes 7 which communicate with the individual ducts 8 in any of the well-known ways, such, for instance, as seen in Figs. 2 and 3 where the ducts are shown as staggered and inclining in opposite directions for communication with the ducts 2 of the bed or tube support 1, as seen clearly in Fig. 3. This particular arrangement of ducts and note-holes, however, is not made the subject-matter of this application and the arrangement thereof may be variously modified. In the under face of the cap or face piece 6 are channels or chambers 9, in this instance shown as extending upon opposite sides of and at both ends of the central portion 10 through which the ducts 8 and the note-holes 7 extend. The portions of the chambers at the ends communicate with the openings 4 leading to the ducts 5, as will be readily understood upon reference to Fig. 1.

11 are bleed holes, one for each of the ducts 8, each bleed hole affording communication between said duct and the chamber 9 upon one or the other side of the central portion 10 of the cap or face piece, as will be readily understood upon reference to Fig. 3. These bleed holes may be formed in any suitable manner, as by drilling, and may be made of any required size.

The adjacent faces of the cap and bed are ground so as to form an air-tight joint and the cap may be held in position upon the bed in any suitable manner. In the present instance, I have shown the bed as having rising therefrom the studs 12 adapted to engage in corresponding sockets or depressions 13 in the under side of the cap, screws or other analogous means 14 being employed and passed through openings 15 in the cap and engaging in corresponding openings 16 in the bed for firmly yet detachably holding the cap in place but allowing of its quick and easy removal when desired.

It will be understood upon reference to Figs. 1, 2 and 3 that, when in position and

in operation, the bleed is through the openings 11 into the chamber 9 and from thence through the ducts 4 and conduits 5 to the action or tension-chamber. Whenever, from

5 any cause, the bleeds need cleaning, it is only necessary to remove the cap, when the bleeds may be easily and quickly cleaned of any dust or other foreign substance that may have accumulated therein and the cap
10 then put back and secured in position. If it is desired to vary the size of the bleed holes, this can be easily done by removing the cap and reaming out the holes.

In Fig. 4 I have shown the same idea
15 embodied in a reversal of the construction, that is, the bed or tube support 1 is provided with the chambers 17 and the bleed holes 18 extend from the ducts 2 instead of from the ducts in the cap piece. The result is the
20 same, the removal of the cap piece provides ready access to the bleed holes. It is to be understood that the cap is to be detachably secured in place by means, such as shown in Fig. 1, or any other convenient form of
25 fastening devices.

In Figs. 5 and 6 I have shown the same characteristic feature of the invention but in a tracker-bar in which the note-holes 19
30 extend straight and entirely through the cap 6 for communication with the note-holes 20 in the bed or tube support 1, the ducts 21 being in the bed and staggered, as shown. In this instance, the bleed holes 22 communicate with a chamber 23 in the cap, it being evident
35 that the chamber need be upon but one side of the centrally disposed note-holes 19. It is to be added that I should consider a reversal of the construction shown in Fig. 6, in a manner similar to the reversal of the construction of Fig. 3 as indicated in Fig. 4,
40 clearly within the scope of my present invention.

The relative size of the note holes and ducts may vary, for instance, in Figs. 3, 4 and 6
45 the note holes are shown larger than in Figs. 2 and 5.

From the above, it will be seen that I have devised a simple and efficient form of tracker-bar for the purposes described, in
50 which the bleeds are not only in proximity to the note opening in the tracker-bar but also easily accessible, and, while the practical embodiments of the invention as hereinbefore disclosed are what I at the present time
55 consider preferable, it is evident that the same is subject to changes, variations and modifications in detail, proportion of parts and other accessories. I therefore do not intend to restrict myself to the form and details hereinbefore described but reserve the

right to make such changes, variations and modifications as come properly within the scope of the protection prayed.

Skilled labor or mechanic is not necessary in order to repair the player in case a
65 note does not properly respond, as anyone can readily clean out the bleed holes and this in a very short time.

What is claimed as new is:—

1. A sectional trackerbar having ducts and
70 bleed holes opening into the same inaccessible when the tracker sections are assembled and readily accessible for cleaning upon removal of one of the sections of the trackerbar. 75

2. A tracker-bar comprising a bed and a removable cap, said tracker bar being provided with note-holes and bleed holes inaccessible when the cap is in place and accessible upon removal of the cap. 80

3. A tracker-bar comprising a bed and a removable cap, the same being provided with note-holes and with bleed holes inaccessible when the cap is in place and accessible upon removal of the cap and a chamber
85 with which said bleed holes communicate.

4. A tracker-bar comprising a bed and a removable cap, said tracker bar being provided with note-holes and bleed holes inaccessible when the cap is in place and accessible upon removal of the cap and a chamber
90 with which said bleed holes communicate, and exhaust conduits leading through the bed and communicating with said chamber.

5. A tracker-bar comprising a bed and a
95 removable cap, said bed and cap having note-holes and bleed holes there being a chamber with which said bleed holes communicate said bleed holes being inaccessible when the cap is in place and accessible by
100 removal of the cap.

6. A tracker-bar comprising a bed and a removable cap, said bed and cap having note-holes and bleed holes there being a
105 chamber with which said bleed holes communicate said bleed holes being inaccessible when the cap is in place and accessible by removal of the cap, the adjacent faces of the cap and bed being ground to form an airtight joint. 110

7. A tracker-bar formed of a plurality of superposed parts, one of said parts having bleed holes, and another removable for access to said bleed holes.

Signed by me at Washington, District of
Columbia, this 30th day of March 1909. 115

GEORGE P. BRAND.

Witnesses:

E. N. BOND,

JOHN SCRIVENER.