

No. 754,750.

PATENTED MAR. 15. 1904.

W. F. COOPER, JR.

PEDAL STOP ACTION FOR AUTOMATIC PIANO PLAYERS.

APPLICATION FILED DEC. 21, 1903.

NO MODEL.

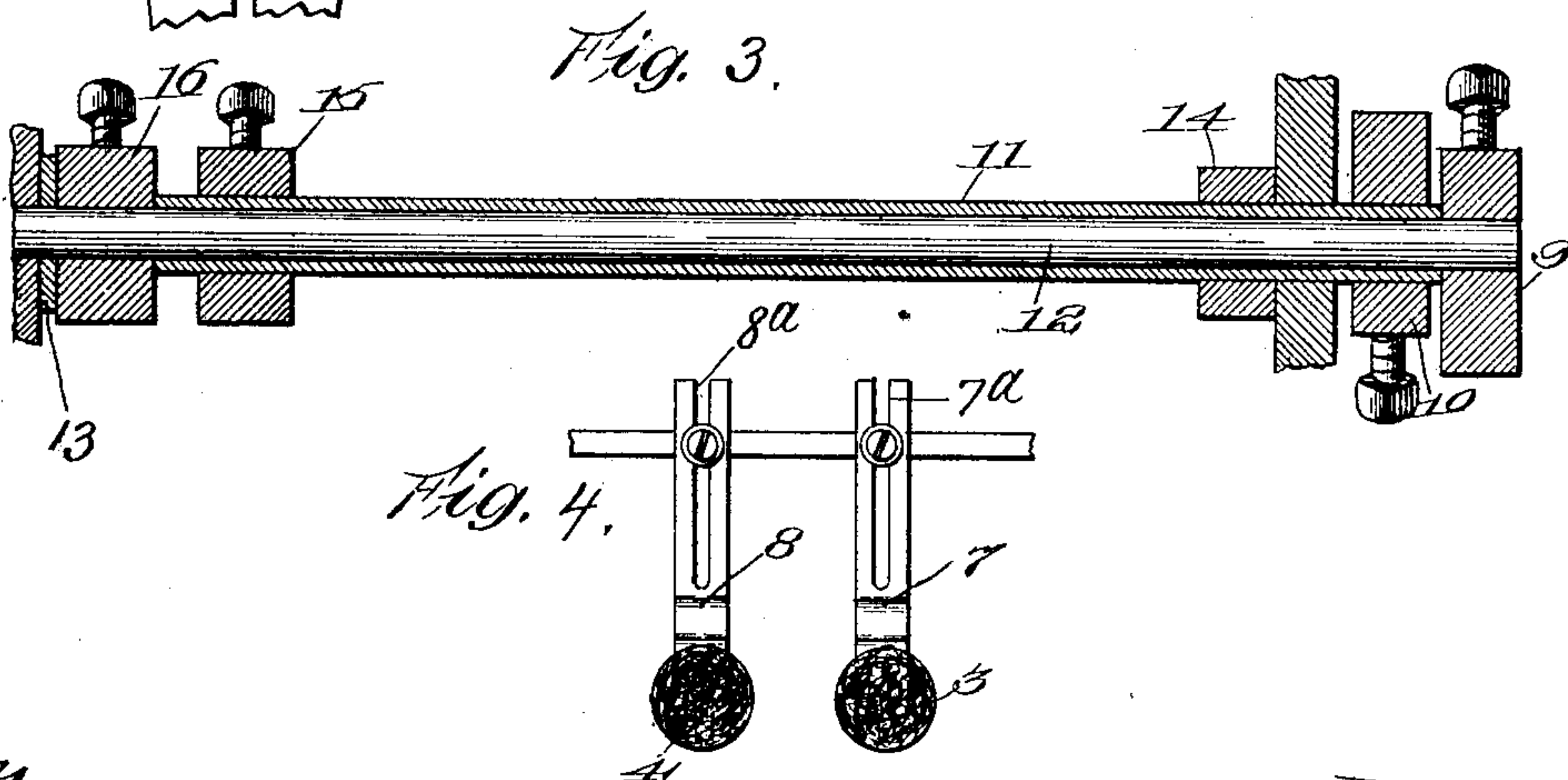
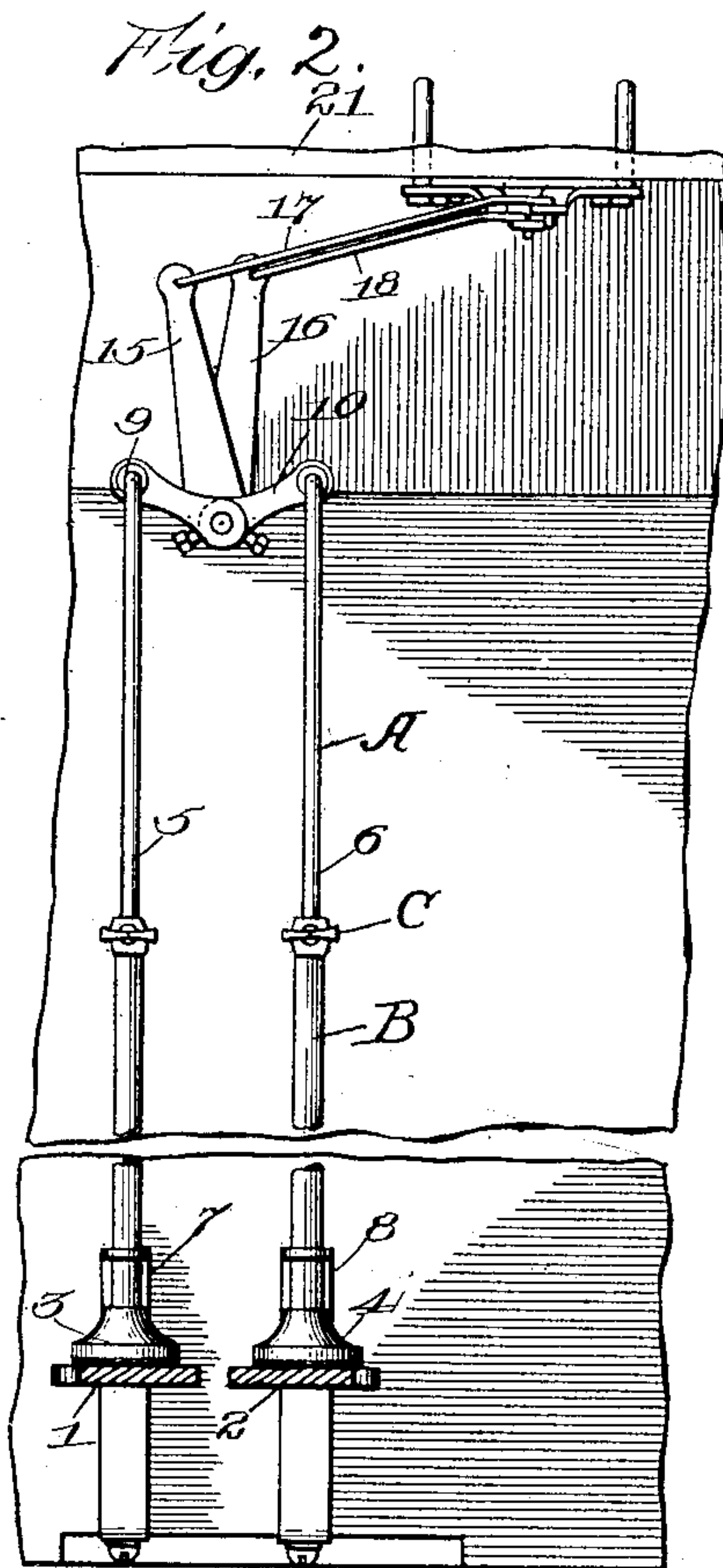
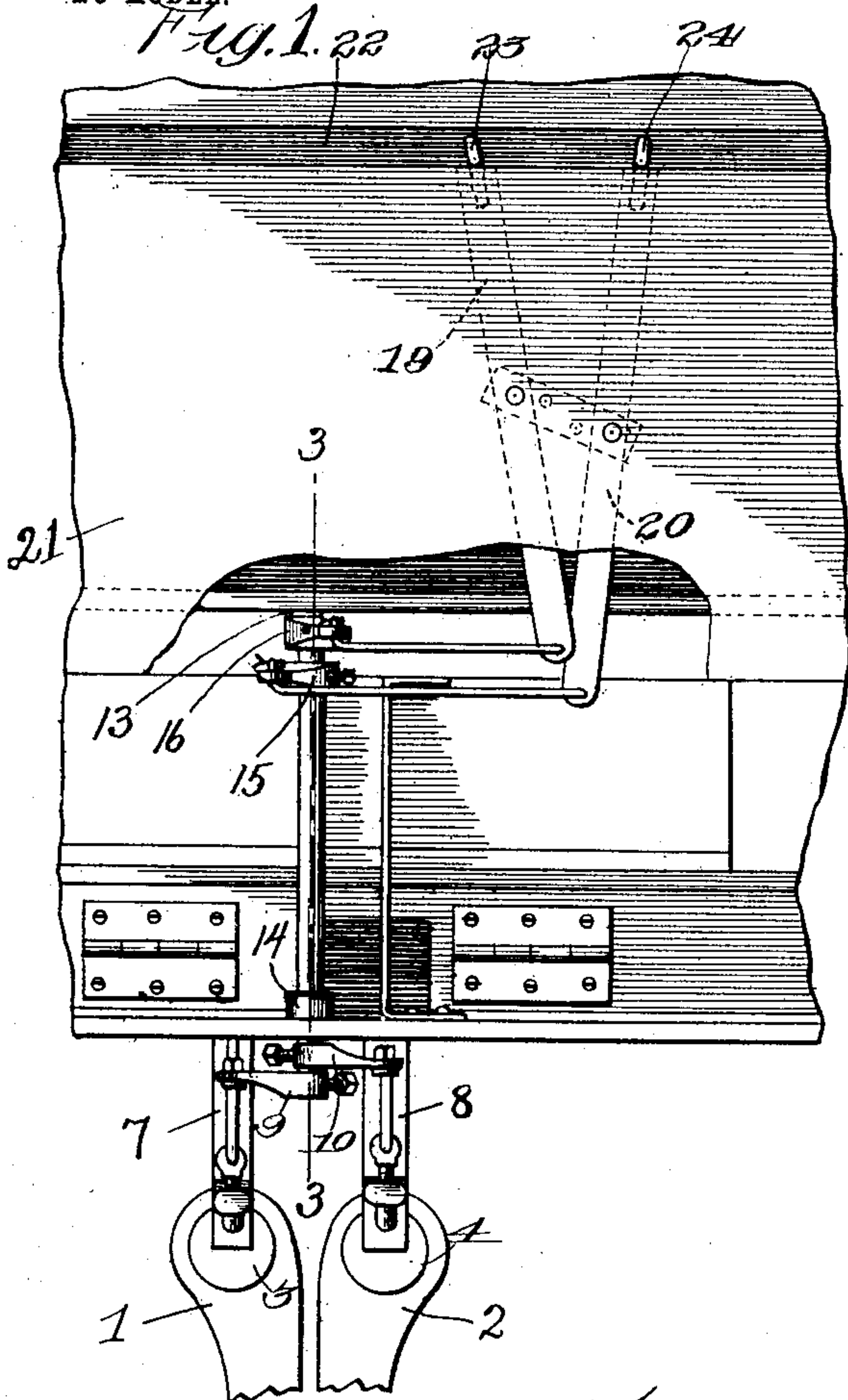
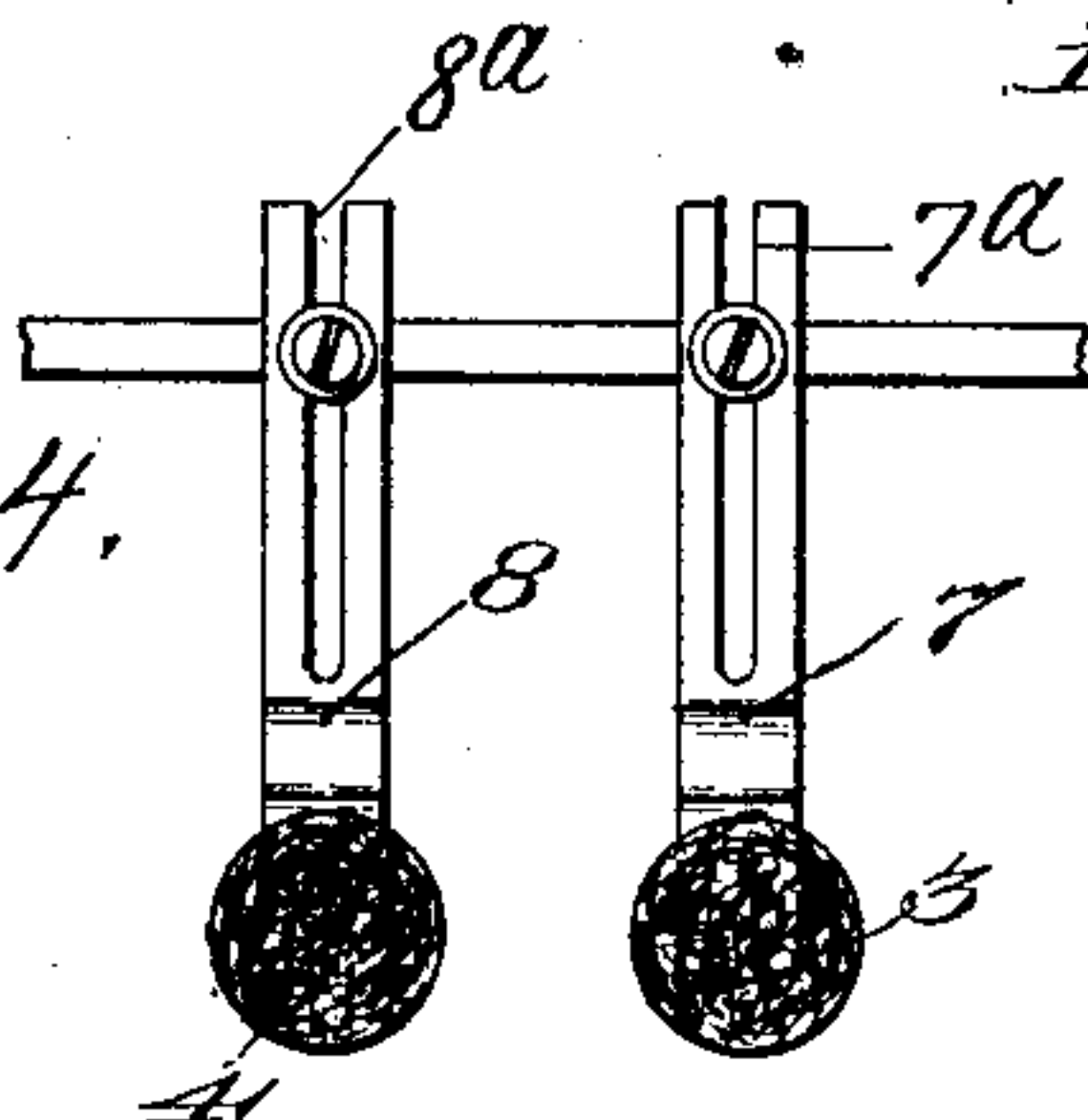


Fig. 4.



Witnesses:

Fred G. Fischer
J. S. Abbott

Wm F. Cooper Jr. Inventor:
by Burton Burton
his Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM F. COOPER, JR., OF CHICAGO, ILLINOIS, ASSIGNOR TO THE
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PEDAL-STOP ACTION FOR AUTOMATIC PIANO-PLAYERS.

SPECIFICATION forming part of Letters Patent No. 754,750, dated March 15, 1904.

Application filed December 21, 1903. Serial No. 185,917. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. COOPER, Jr., a citizen of the United States, residing at 2030 Harvard street, Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Pedal-Stop Actions for Automatic Piano-Players, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

This invention relates to the devices pertaining to an automatic piano-player for operating the pedal-stops of the piano.

It consists in the features of construction set out in the claims.

In the drawings, Figure 1 is a plan view of a portion of the platform-board of a player and the parts below the same pertaining to my invention, the board being broken away in part to disclose the operating elements below the same. Fig. 2 is a rear elevation of a portion of the player-case, showing the same devices. Fig. 3 is a section at the line 3 3 on Fig. 1. Fig. 4 is a detail inverted plan of the plunger-buttons and bracket.

The pedal-stops 1 and 2 of the piano, commonly called the "loud" and "soft" pedals, are overhung by the buttons 3 and 4 upon the ends of plunger-rods 5 and 6, which are guided in brackets 7 and 8, secured to the lower end of the rear wall of the case, and are connected at their upper ends to lever-arms 9 and 10, respectively, upon shafts 11 and 12, the former journaled within the latter, which is a sleeve journaled in bearings 13 and 14, mounted on the case. At the forward end of the shafts 11 and 12 they are provided with the upstanding arms 15 and 16, respectively, and these arms are respectively connected by links 17 and 18 to the rear ends of levers 19 and 20, fulcrumed on the under side of the platform-board 21, which is recessed at the forward edge to form a slot 22, through which the operating-fingers 23 and 24 of the lever-arms 19 and 20, respectively, protrude for convenient manipulation by the operator. The levers 19 and 20 may be held firmly enough at their fulcrum connections to the foundation-

board to afford sufficient friction to prevent the weight of the plunger rods and buttons at the lower end thereof from moving said stop-lever arms and the connections therefrom to the plungers, and also to prevent the stop-pedals 1 and 2 of the piano from forcing up the plungers when they have been depressed. The friction may be increased at any other of the several points in the connections from the stop-fingers to the plunger-button for the same purpose. The plunger-rods 5 and 6 are extensible for the purpose of adjusting the terminal buttons which they carry to the pedal-stops of the piano, such adjustability being obtained by forming them in two parts A and B, which telescope one within the other, the exterior element B having a thumb-screw C for securing the two parts as they may be adjusted. The brackets 7 and 8 are adjustable to bring the plunger-buttons in correct position over the pedal-stops, respectively, such adjustment being afforded by slotting the lower horizontal elements 7^a 8^a of said brackets and securing them to the player-case by screws taking through said slots into the lower edge of the rear wall of the case, so that the brackets may not only be adjusted pivotally about said screws, but also may be adjusted back and forward to the extent of the slots.

I claim—

1. A pedal-stop action for an automatic piano-player comprising fore and aft rock-shafts journaled on the case; lever-arms at the rear ends of such shafts, and plungers operated thereby for actuating the pedal-stops; upstanding lever-arms at the forward ends; horizontally-swinging levers fulcrumed on the case, having operating-fingers at their forward ends accessible to the operator, and links connecting their rear ends with said upstanding arms respectively.

2. A pedal-stop action for an automatic piano-player comprising rock-shafts mounted on the case having at their forward ends connections extending into position accessible to the operator, and having at their rear ends plunger-operating connections; plungers connected therewith for actuating the pedal-stops,

and guide-brackets for said plungers mounted on the case for pivotal and fore and aft adjustment.

3. A pedal-stop action for an automatic
5 piano-player comprising plungers for operating the pedal-stops; mechanism mounted on the case and connected with the plungers at their upper ends and extending into position accessible to the operator, and guide-brackets
10 for the lower ends of the plungers having slotted horizontal arms and bolts taking through

the slots in said arms for securing the brackets to the case with capacity for pivotal and fore and aft adjustment.

In testimony whereof I have hereunto set 15
my hand, in the presence of two witnesses, at Chicago, Illinois, this 7th day of December, A. D. 1903.

WILLIAM F. COOPER, JR.

In presence of—

CHAS. S. BURTON,

FRED. G. FISCHER.