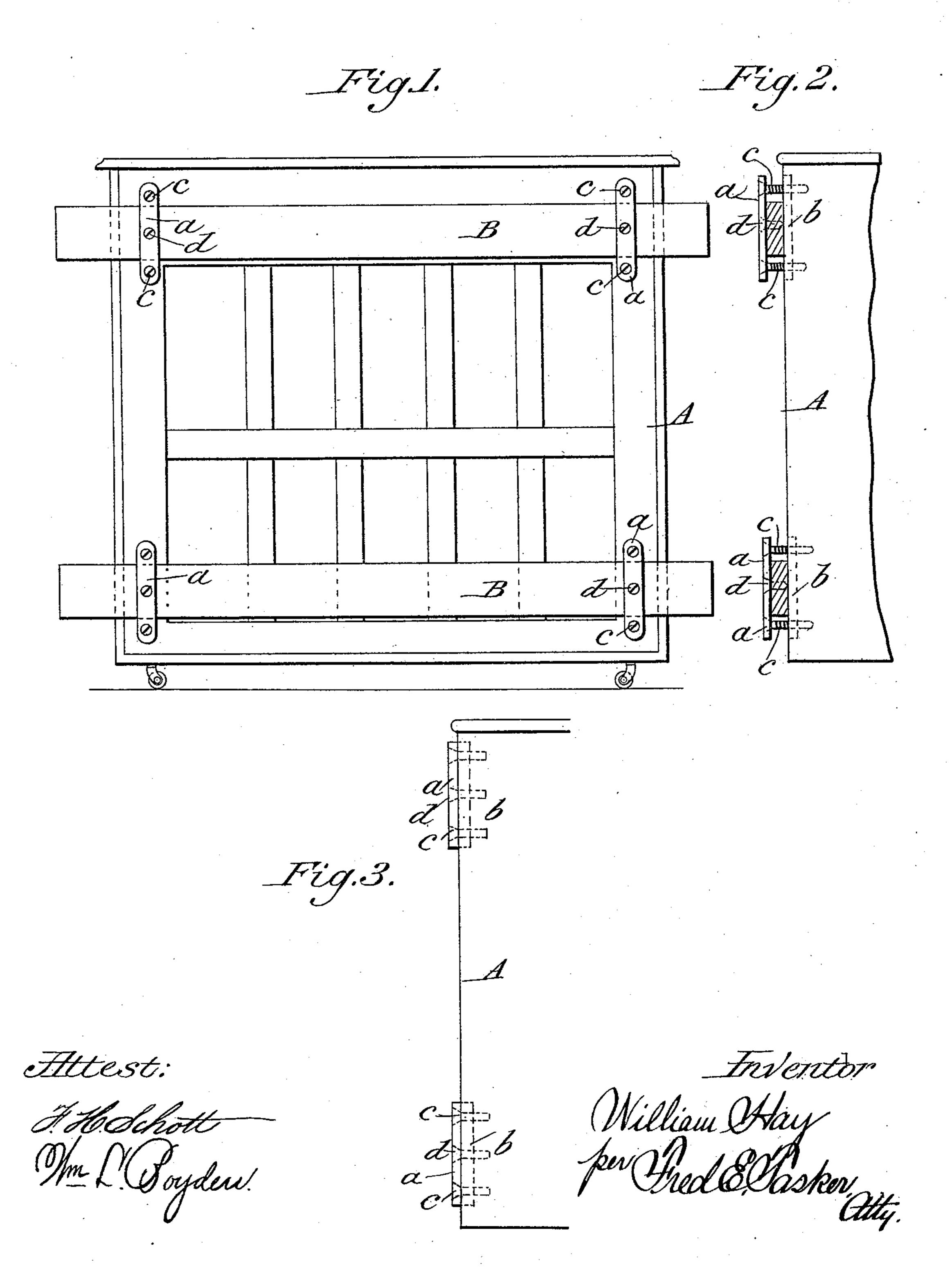
(No Model.)

W. HAY. DEVICE FOR PACKING PIANOS.

No. 447,112.

Patented Feb. 24, 1891.



United States Patent Office.

WILLIAM HAY, OF BOSTON, MASSACHUSETTS.

DEVICE FOR PACKING PIANOS.

SPECIFICATION forming part of Letters Patent No. 447,112, dated February 24, 1891.

Application filed December 1, 1890. Serial No. 373,228. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HAY, a subject of the Queen of Great Britain, residing at Boston, in the county of Suffolk and State 5 of Massachusetts, have invented certain new and useful Improvements in Devices for Packing Pianos; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable 10 others skilled in the art to which it appertains

to make and use the same.

This invention relates to an improvement in the packing of pianos for shipment, the object being to provide some simple and effi-15 cient means whereby packing-boards can be readily connected or disengaged from the backs of upright or other pianos whenever it may be necessary to box or incase the piano or other musical instrument for the purpose 20 of carriage from place to place; and the invention therefore consists, essentially, in the construction, arrangement, and combination of parts, substantially as will be hereinafter described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a rear elevation of the piano provided with my improved packing devices. Fig. 2 represents the said devices in section. Fig. 3 is an outline view 30 showing the devices in the position that they occupy when the packing-boards have been

removed.

Similar letters of reference designate corresponding parts throughout the several fig-

35 ures of the drawings.

Heretofore in the preparation of pianos, organs, and other similar musical instruments for packing for purposes of transshipment it has been customary to box or incase them within a casing sufficiently large to easily contain them with plenty of room between the sides of the piano and the sides of the box, and in order that the musical instrument might thus stand freely within the surround-45 ing case it has been necessary to provide it with "packing-boards," so called, which are simply pieces of wood longer than the piano or organ, so that the ends thereof would project a few inches beyond each end of the 50 piano, two of said boards being commonly employed and being screwed firmly to the back

of the piano, said boards being of a length equal to the length of the packing-box, and thus adapted to press firmly against the sides of the box and prevent any lateral or other 55 displacement or movement of the musical instrument within the box, thus insuring it against injury from rubbing or scratching. Furthermore, cleats were provided to assist in holding the piano firmly. The repeated 60 connection of these packing-boards to the pianos by screws every time it was found necessary to remove a piano from place to place, and in many cases it is well known that pianos are transported very often from house to 65 house, resulted in the marring and disfigurement of the piano-frame, owing to the numerous holes and cuts made therein by the screwing of the packing-boards thereto. It therefore seemed necessary to provide some 70 means of packing a piano readily, surely, and effectively without resorting to this method, which is so destructive of the appearance of the piano, and I have therefore devised means whereby one or more packing-boards may be 75 readily connected to and disengaged from the piano-back, said back being provided with devices permanently carried thereon and acting as clamps for the packing-strip.

The back of the piano, organ, or other mu- 80 sical instrument, near each corner thereof, is provided with a metallic plate or strip of suitable size and form, denoted by the referenceletter b, said plates being preferably short vertical strips preferably set into mortises in 85 the piano-back and fastened in place by means of screws, of which there may be any desired number. These plates may be termed "inner plates." They are made sufficiently thick to have screw-threads tapped in them, two or 90 three or any other desired number, according to the number of holes in the plates which are adapted to be connected to them. In addition to the inner plates, which are held rigidly secured at all times to the back of the 95 piano, I provide also a set of four outer plates a, one for each inner plate, and located thereon. These outer plates will preferably be of the same size as the inner plates b. They are highly finished, being polished, nickel-plated, too gilded, or otherwise finished, so that they may present a neat and ornamental appearance.

They are provided with screw-holes, of which there may be any number, through which pass screws, two or more, for instance as cc, which screws enter proper holes, already referred to, which are tapped in the inner plates b.

BB denote the packing-boards. When the clamping devices are not in use, the outer plates a a will be screwed down tightly upon the inner plates b in the manner shown in 10 Fig. 3, in which position they will not mar or disfigure the regularity and neat appearance of the piano-back, but will rather add to the looks thereof. When it is desired to pack the piano in its case or box, the screws $c\bar{c}$, which 15 hold the outer plates a in position, will be loosened sufficiently to allow the said outer plate a to be removed or lifted away from the other inner plates b far enough to permit the packing-board B to be slipped through be-20 tween the inner and outer plates in the manner shown in Figs. 1 and 2, after which, by again turning the screws cc, the outer plates a may be clamped down rigidly upon the packing-boards, and the latter thus securely 25 and immovably fixed in position upon the back of the piano. Although two screws, such as cc, will be sufficient in the generality of cases, yet for greater safety it may perhaps be found proper and desirable to provide at 30 times a third screw at d, which can pass through the outer plate a and into the packing-board B, as shown in Fig. 2, or can pass through into the inner plate b, as indicated in Fig. 3. By the use of these pairs of plates, 35 serving as clamps for the packing-boards, the piano-back will not be injured or disfigured by the multiplication of unsightly holes and cuts in the back thereof, which I have shown

It will be evident that in the practical carrying into effect of my invention I may desire to depart somewhat from the strict and exact form of the invention as depicted and described herein, so far as the form and shape of the plates are concerned, their number, the number of the screws, and other minor details holding, of course, to the main construction as I have described it.

result from constant packing and unpacking

Having thus described my invention, what 50 I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described means for packing pianos for shipment, consisting of one or more plates connected permanently to the piano- 55 frame and one or more plates located on the first-mentioned plates and connected thereto by screws, and a packing-board adapted to be securely held between the said outer and inner plates whenever the piano is to be packed. 60

2. In a device for packing pianos, the combination of pairs of plates located at suitable points on the back of the piano-frame, the inner members of each pair being permanently secured to the frame and provided with screw- 65 holes which receive the screws belonging to the outer members of the pair, and packing-boards adapted to be held by the pairs of plates, which act thereon as clamps, substantially as described.

3. In a device for packing pianos for shipment, the combination of four plates permanently secured to the piano-back near the four corners thereof, four other plates located on the first four and removably connected there-75 to by suitable screws, said outer plates being adapted to rest closely on the inner plates at ordinary times, but adapted, also, to be removed from the inner plates and clamped down closely upon packing-boards, which pass 80 between the inner and outer plates when the piano is to be packed for shipment, substantially as described.

4. The combination of the four plates b, set in mortises in the piano-back near the corners 85 thereof, the four plates a, located on the inner plates and removably connected thereto by screws c, and the packing-boards BB, adapted to be held between the outer and inner plates when the piano is to be packed for shipment, ab substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM HAY.

Witnesses:
MARY E. WOODBURN,
JOHN L. S. ROBERTS.