H. SHEBLE.

HORN SUPPORTING CRANE.

APPLICATION FILED DEC. 21, 1906.

970,655. Patented Sept. 20, 1910.

Fig. 1,

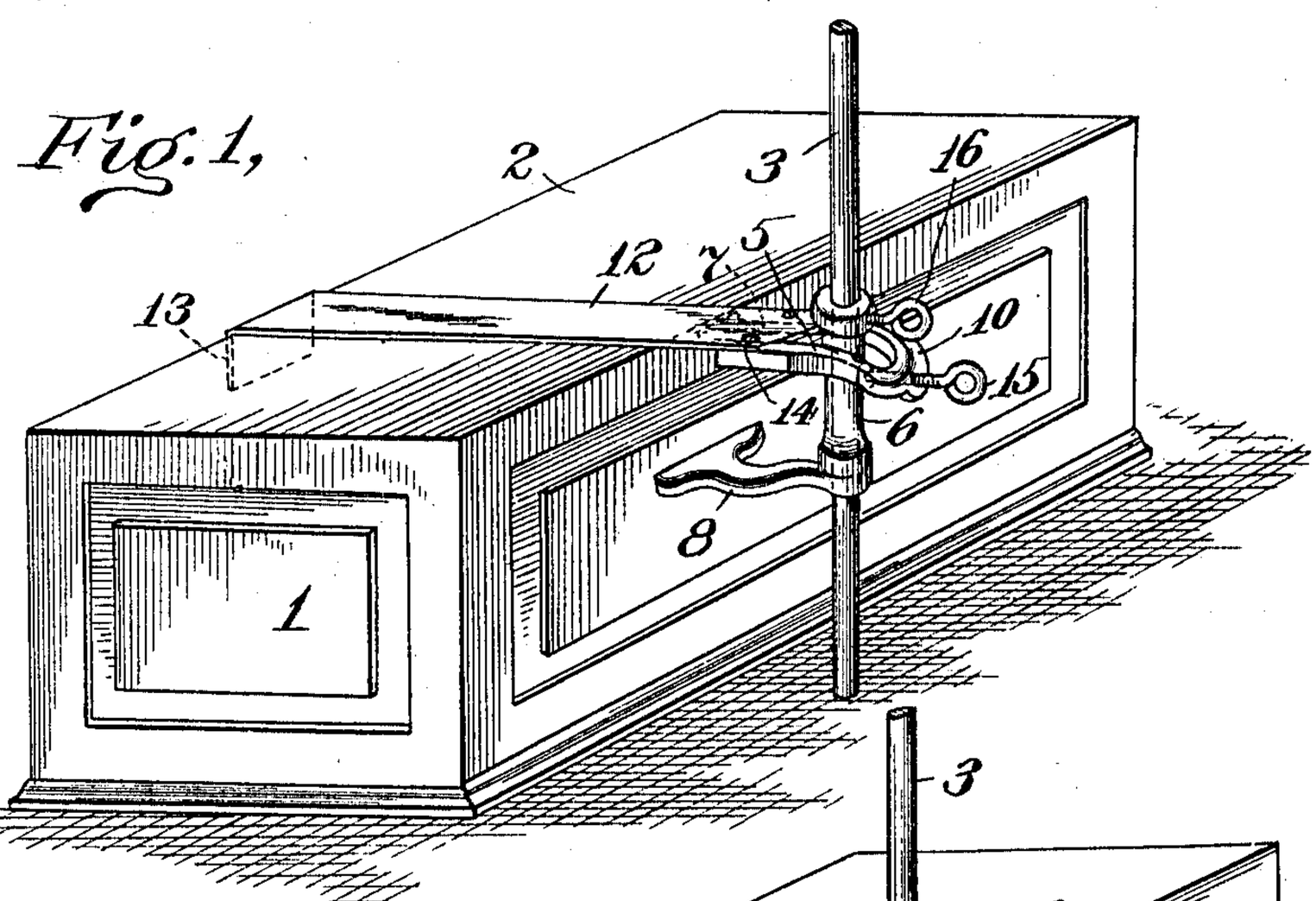

Fig. 2,

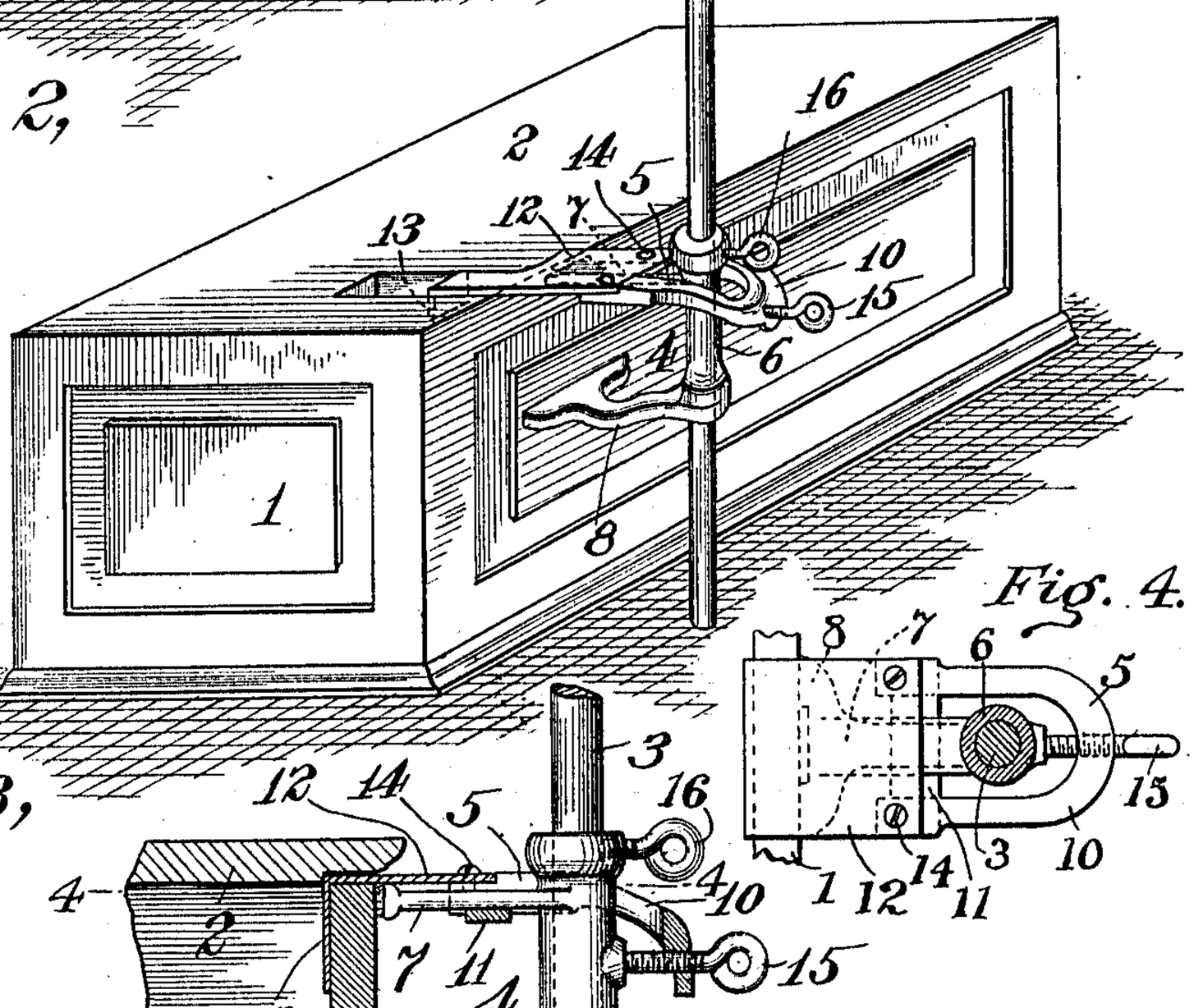

Fig. 3,

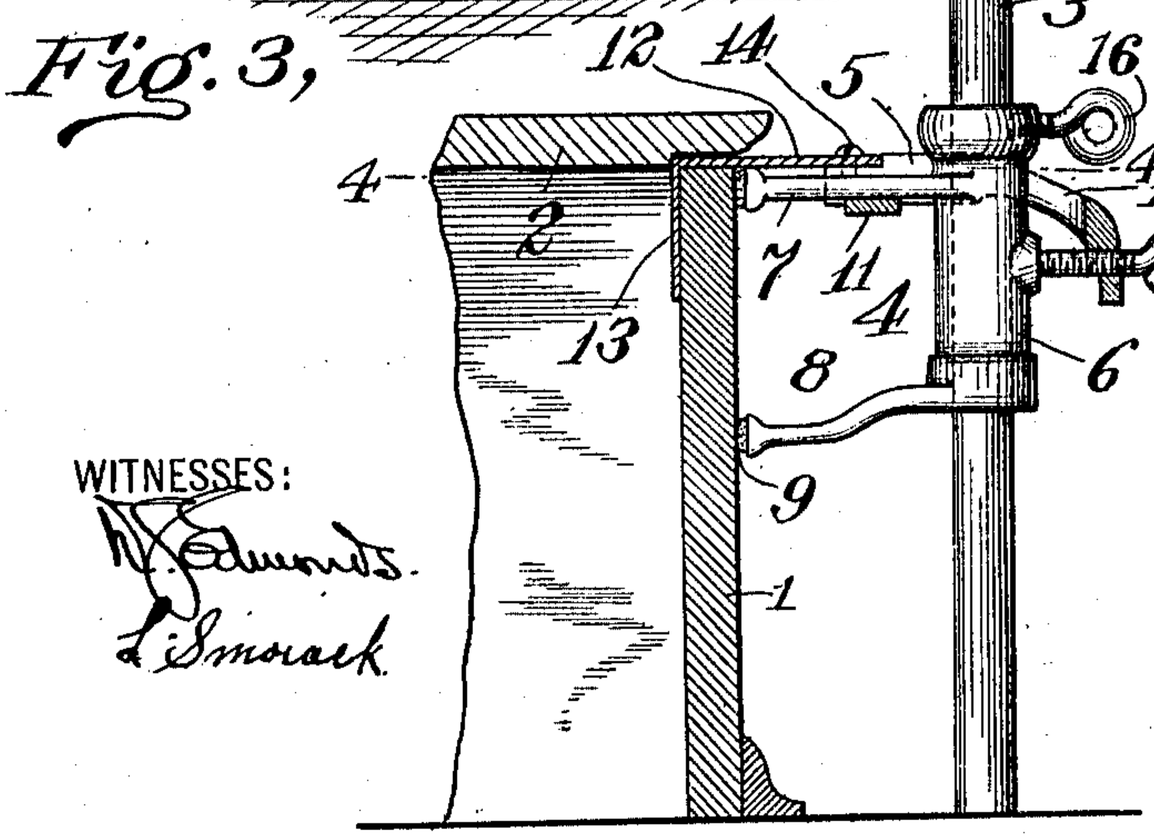

Fig. 4.

WITNESSES:

H. J. Edmunds.

L. Smorack.

INVENTOR

Horace Sheble

BY

H. J. Edmunds

ATTORNEY

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HORACE SHEBLE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO NEW JERSEY PATENT COMPANY, OF ORANGE, NEW JERSEY, A CORPORATION OF NEW JERSEY.

HORN-SUPPORTING CRANE.

970,655. Specification of Letters Patent. **Patented Sept. 20, 1910.**

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To all whom it may concern:

Be it known that I, HORACE SHEBLE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Horn-Supporting Cranes, of which the following is a specification.

This invention relates to cranes adapted for use as the support for the amplifying horn of a talking machine.

The object of the invention is to effect certain improvements in the construction of such cranes to the end that a crane is provided which is of simple and inexpensive construction, consisting of few parts readily manufactured at small cost and quickly assembled, which can be easily attached to a talking machine motor-box, and which is capable of holding the horn securely in the desired position.

The preferred embodiment of my invention is indicated in the accompanying drawings in which—

Figure 1 is a perspective view of the crane support secured to the motor-box of a talking machine, Fig. 2 is a similar view of a modified form of support and Fig. 3 is an elevation partly in section of a further modification of the support. Fig. 4 is a plan view, partly in section, on line 4—4 of Fig. 3.

The construction shown in the perspective views, Figs. 1 and 2, is exactly the same as that shown in Figs. 3 and 4 except that clamping members of different lengths are shown in each of the Figs. 1, 2 and 3, and Fig. 4 may be considered as a partial plan and sectional view of the construction shown in Figs. 1 and 2 as well as in 3.

Referring to the drawings, 1 indicates the motor-box of a talking machine of any suitable construction; the box shown in Figs. 1 and 2 is of the type usually employed with graphophones having the support for the cylinder and reproducer mounted on the top 2 thereof. The reproducing mechanism is not shown in the drawings as it is unnecessary to an understanding of the invention.

Referring first to Fig. 3 of the drawings which best illustrates the construction of the crane-support, the horn is carried by a horn-supporting crane consisting of a vertical post 3 having a lateral arm, a support 4 for the post and a clamping member 5 for gripping the support 4 to the motor-box. The support 4 consists of a tubular body portion 6 in which the post 3 is received and secured and one or more arms extending outwardly from this body portion 6; preferably the support 4 is a casting and two arms 7 and 8 are provided integral with the body 6. Secured on the end of each of the arms 7 and 8 is a pad or buffer 9 of leather or other suitable material. The clamping member 5 is mounted upon the upper arm 7 of the support so as to slide back and forth thereon. It consists of a yoke 10 extending around the tubular portion 6, a cross-head 11 integral therewith or secured thereto extending under the arm or bracket 7 and a plate 12 having a downwardly bent end 13 forming a clamping jaw. The plate 12 is secured by screws 14 to the member 5 so that it can be readily removed to substitute a plate of a different shape and the projecting arm or bracket 7 extends between it and the cross-head 11. In the yoke 10 is a threaded opening to receive a screw 15 whose end bears against the body-portion 6. The end of the yoke 10 carrying the screw 15 is bent downwardly as shown so that the point of engagement of screw 15 with body 6 is below arm 7; for this reason, tightening screw 15 will not have a tendency to tilt body 6 relatively to the side of the motor-box. In the tubular portion 6 is a threaded opening to receive a screw 16, the end of which is adapted to engage the post 3 to hold it in the desired position. If merely the end of the post 3 were inserted in the tube 6 and secured therein by screw 16, the weight of the parts of the horn and crane extending beyond the side of the motor-box might overbalance the weight of the other parts. This is prevented in a very simple manner by carrying the opening for the post 3 entirely through the portion 6 and passing the end of the post through the portion 6 so far that its end bears upon the same support as the motor-box of the talking-machine. In this position, post 3 is secured by screw 16 as shown in each of the figures of the drawing. The end of the post 3, bearing thus on the surface of the table or other support for the machine, holds the machine against being overturned by the weight of the horn.

The motor-box shown in Fig. 3 has a top 2 which is hinged to the sides and the clamp-

ing plate 12 is therefore formed to extend under the cover and downwardly against the inner side of the side of the box. But in many cases the top 2 of the box is rigidly secured to the sides and this construction therefore cannot be used. Such a box is shown in Fig. 1. With such a box, I employ a crane and crane-support constructed as above described except that the clamping plate 12 is of such length that it extends entirely across the top of the box, its downwardly turned end lying against the opposite edge thereof. With this form of crane support the screw 15 is turned back in its opening in yoke 10 and the plate 12 moved along on arms 7 away from the body 6 as far as the screw 15 will permit. The support is then held in position with the end of arm 7, or the ends of arms 7 and 8 if both are provided, lying against the side of the box, and the plate 12 extending across over the top 2 and down along the opposite edge thereof. The screw 15 is then tightened up to cause the clamping plate to move toward body 6 until the top of the box is gripped tightly between the end 13 of the plate 12 on one side and the end of the arm 7 on the other, while the end of arm 8 bearing against the side of the box serves to steady the support. The vertical post 3 is then adjusted in the tubular body 6 and secured by screw 16 in such position that its end bears on the table or other support.

In Fig. 2 is shown a box having an opening in the top thereof for an operating lever or a member connecting the motor to the parts mounted on the exterior of the box. With such a box a plate 12 may be employed extending over the top of the box as before, but of less length, its downwardly turned end entering the opening in the top 2. When the parts are in position the screw 15 may be tightened to cause the end of plate 12 to grip the side wall of the opening and thus hold the support rigidly to the box.

It will be seen that the support is of very simple construction, that the few parts of which it consists can be manufactured and assembled at small cost and it can be quickly secured rigidly to a motor box. By employing a clamping plate extending over the upper surface of the top of the box, the support can be used with talking machines having motor-boxes whose tops are permanently secured to the sides. Furthermore, the use of the support is in no way dependent upon the height of the box, as variations in height are offset by the adjustment of post 3 in the tubular support 6.

Having now described my invention, what I claim as new therein and desire to secured by Letters Patent is as follows:—

1. In a horn supporting crane, the combination of a vertical post, a tubular member for receiving the same and having a pair of arms extending inwardly from the upper and lower portions thereof, the inner ends of which arms are adapted to engage the outer surface of one of the sides of a cabinet, a clamping member mounted to slide upon one of said arms having means to engage a surface of said cabinet opposite to that engaged by said arms and having a portion surrounding said tubular member and extending on the outer side thereof to a point intermediate said arms, and means for forcing said portion outwardly from said tubular member applied to the latter intermediate said arms to cause said clamping means and the ends of said arms to tightly engage their coacting surfaces, substantially as described.

2. In a horn supporting crane, the combination of a crane, a vertical crane-receiving member, having arms extending inwardly from the upper and lower portions thereof, the feet of which are adapted to contact one side of a cabinet, a clamping member slidably mounted upon the upper of said arms, having a downward clamping projection upon its inner end adapted to engage a surface of the cabinet, and having a portion extending adjacent said receiving member intermediate said arms, and a screw passing through said portion and coacting with said member intermediate said arms for tightening the engagement of said clamping projection, substantially as described.

3. In a horn supporting crane, the combination of a crane, a vertical crane-receiving member having arms extending inwardly from the upper and lower portions thereof, the feet of which are adapted to contact one side of a cabinet, a clamping member slidably mounted above the top of said side and the upper of said arms, having a downward clamping projection upon its inner end adapted to engage a surface of the cabinet and having its outer end extending beyond said receiving member and bent downwardly to a point intermediate said arms and a screw passing through said bent portion and contacting the outer side of said member for tightening the engagement of said clamping projection, substantially as described.

4. In a horn supporting crane, the combination of a crane, a vertical crane-receiving member having arms extending inwardly from the upper and lower portions thereof, the feet of which are adapted to contact one side of a cabinet, a clamping member slidably mounted above the top of said side and the upper of said arms, having a downward clamping projection upon its inner end adapted to engage a surface of the cabinet and having its outer end extending around said receiving member in a yoke and bent downwardly on the outer side of said member, and a screw passing through said bent

portion and contacting the outer side of said member intermediate said arms, substantially as described.

5. In a horn supporting crane, the combination of a crane, a vertical crane-receiving member having arms extending inwardly from the upper and lower portions thereof, the feet of which are adapted to contact one side of a cabinet, a clamping member slidably mounted upon the upper of said arms and having a cross-head attached thereto engaging the lower surface of said arm, a clamping projection upon the inner end of said clamping member, a yoke surrounding said receiving member upon the outer end of said clamping member and bent downwardly beyond the same, and a screw passing through said bent portion and engaging said receiving member, substantially as described.

6. In a horn supporting crane, the combination of a crane, a vertical crane-receiving member, having arms extending inwardly from the upper and lower portions thereof, the feet of which are adapted to contact one side of a cabinet, a clamping member slidably mounted upon one of said arms, an interchangeable clamping plate secured to said clamping member having a downward projection upon its inner end, and means coacting with said clamping and receiving members below the upper of said arms for adjusting the clamp, substantially as described.

This specification signed and witnessed this 18th day of December, 1906.

HORACE SHEBLE.

Witnesses:

S. O. EDMONDS,

D. J. EDMONDS.