

B. J. STARKS.
EXTRACTOR FOR PIANO HAMMERS.
APPLICATION FILED JAN. 28, 1920.

1,365,559.

Patented Jan. 11, 1921.

Fig. 1,

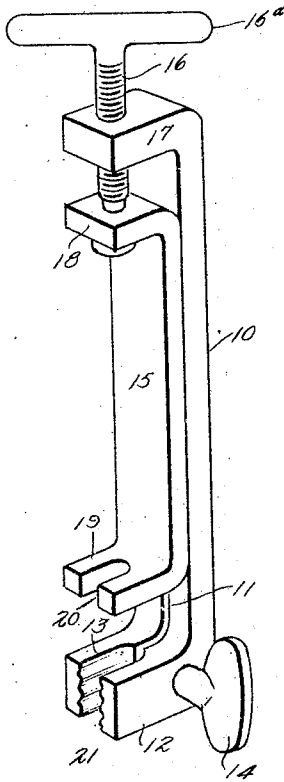


Fig. 2,

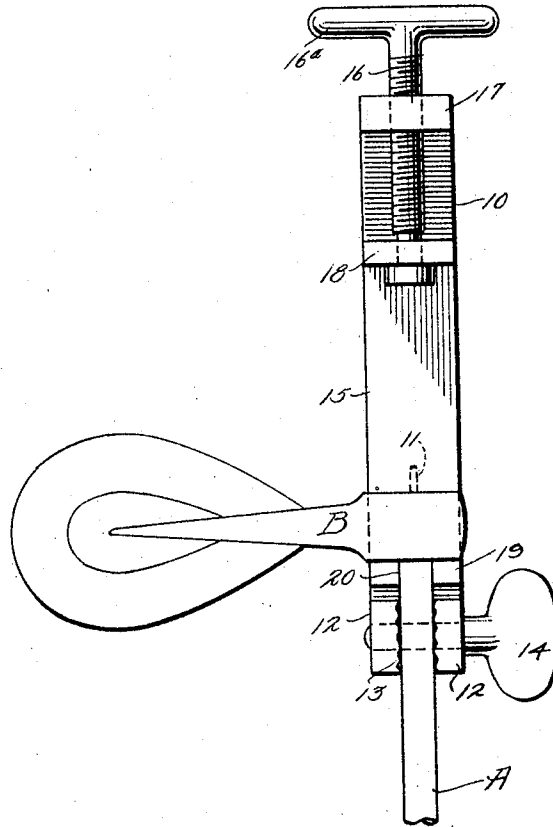
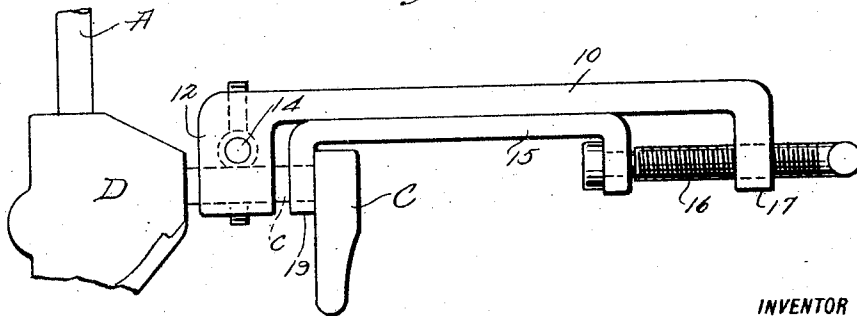


Fig. 3.



WITNESSES

Edw. Thorpe
J. L. Mauliff

INVENTOR

BERNARD J. STARKS.

BY

Mum & Co
ATTORNEYS

UNITED STATES PATENT OFFICE.

BERNARD JAMES STARKS, OF EAU CLAIRE, WISCONSIN.

EXTRACTOR FOR PIANO-HAMMERS.

1,365,559.

Specification of Letters Patent.

Patented Jan. 11, 1921.

Application filed January 28, 1920. Serial No. 354,696.

To all whom it may concern:

Be it known that I, BERNARD JAMES STARKS, a citizen of the United States, and a resident of Eau Claire, in the county of Eau Claire and State of Wisconsin, have invented a new and Improved Extractor for Piano-Hammers, of which the following is a description.

My invention relates to a device for use in connection with the hammer of a piano action and has for its general object to provide an efficient and convenient device of the indicated character arranged to readily operate upon the head, the butt, or the back stop of the hammer.

A more specific object of the invention is to provide a device for the indicated purpose which may be quickly applied to the hammer in a manner tightly clamping the shank from which the hammer head or other member is to be removed, as well as a manually operable device coördinated with the clamp means and adapted to exert an effective pull on the hammer head or other member to be removed.

The nature of the invention and the advantages will more clearly appear from the specific description and claims hereinafter given.

Reference is to be had to the accompanying drawings forming a part of this specification, it being understood that the drawings are merely illustrative of one example of the invention.

Figure 1 is a perspective view of an extractor embodying my invention;

Fig. 2 is a front view thereof, showing the same adjusted to the shank of the hammer for removing either the hammer head or butt;

Fig. 3 is a side elevation showing the device adjusted for removing the back stop.

In carrying out my invention a frame or body 10 is provided, here shown as in the form of an elongated bar which at its forward end is slotted longitudinally as at 11 and formed with lateral jaws 12, the slot 11 between the jaws being widened at its outer ends as at 13 to accommodate the shank A of the piano hammer or like article to be acted upon. Said clamp jaws are provided with a transverse clamp screw 14.

On the face of the body 10 is a slide 15 which advantageously may be in the form of a bar as shown, said slide 15 being adapt-

ed to be actuated by a screw 16, having a suitable head or handle 16^a. Said screw extends through a threaded hole in the laterally disposed rear end 17 of the body 10. The forward end of said screw is swiveled to a lateral lug 18 on the rear end of the slide 15 and parallel or approximately so with the end 17 of the body. The forward end of the slide 15 is in the form of a lateral lug 19 having a longitudinal slot 20 therein registering with the end 13 of slot 11. Thus, the body 10 and slide 15 in the illustrated example are generally of U-shape, the jaws 12 and end 17 of said body being disposed at the same side of the body and the lugs 18, 19 of the slide 15 being disposed approximately parallel with and at the same side of the body as said jaws 12 and end 17. The relative sizes of the body and slide afford clearance for the relative movement of said slide.

With the described construction in order to remove the head B of a piano hammer for example, the shank A of the hammer is placed in the registering slots 13, 20 with the hammer lying in the rear of and against the shoulder presented by the rear side of the lug 19 of the slide 15, (see Fig. 2). The screw 14 is tightened to cause the jaws 12 to tightly clamp the shank and prevent longitudinal movement thereof and the screw 16 is now operated to draw the slide 15 rearwardly, thereby causing the lug 19 to exert a rearward pull directly against the hammer to remove the same from the shank. In order to extract the back stop C of the hammer from its stem or laterally disposed auxiliary shank B, said stem is placed in the slots 13 and 20, the same as described with respect to the shank A with the back stop C in the rear of the lug 19 so that the screw 16 may be operated to cause the rearward movement of the slide 15 for the removal of said back stop. Obviously, the butt D of the hammer can be removed in the same way as the head B is removed, by placing the shank A in the registering slots 13, 20 and with said butt disposed at the rear side of the lug 19.

The tool is useful also for holding the hammer in the gluing of the head, back stop, or butt.

To increase the gripping action of the jaws for more effectively anchoring the engaged shank, the inner faces of the jaws in

practice are provided with transverse corrugations 21 or an equivalent formation, to lie across and engage the inserted shank.

The described device is advantageous in the facility with which it may be applied to the hammer, and the readiness with which the engaged shank is tightly clamped and the part to be removed effectively engaged and acted upon.

I would state in conclusion that while the illustrated example constitutes a practical embodiment of my invention, I do not limit myself strictly to the mechanical details herein illustrated, since manifestly the same can be considerably varied without departure from the spirit of the invention as defined in the appended claims.

Having thus described my invention, I claim:

1. A device of the class described including a body having clamp jaws thereon presenting a slot therebetween disposed longitudinally of the body, a slide on said body presenting a longitudinal slot registering with the first-mentioned slot, whereby said slots may jointly accommodate the shank of a piano hammer or the like, disposed longitudinally of the device, said slide presenting a rearwardly disposed shoulder at the back of said second-mentioned slot for engagement with a hammer head or like member to be removed, and means to cause a rearward movement of said slide.

2. A device for removing parts of piano hammers or like members, carried by a shank, said device including a body having at the forward end laterally disposed clamp jaws presenting a slot therebetween, a clamp screw for tightening and loosening said

jaws, and a slide movable longitudinally of said body and presenting a lug in the rear of said jaws, said lug presenting a transverse slot registering with the first slot so that the shank may be accommodated therein and the member to be removed accommodated in the rear of said lug; together with means to exert a rearward pull on said slide for removing the engaged member.

3. A device of the class described including an elongated body slotted at its front end to form clamp jaws, the slot being widened between said jaws, a clamp screw extending through said jaws, a slide on said body and movable longitudinally between the ends thereof, said slide presenting lateral spaced lugs thereon at one side, the forward lug being slotted longitudinally of the slide so that its slot registers with the slot between the clamps, and a screw extending through and having threaded engagement with the rear end of said body and swiveled to the rear lug of said slide.

4. A device of the class described including a body having laterally disposed members thereon at the front end, presenting a slot therebetween and a slide disposed longitudinally of the body and presenting a laterally offset front end disposed directly behind said members of the body and presenting a slot longitudinally of the slide and in register with the first-mentioned slot, the rear side of said laterally offset front end of the slide presenting a rearwardly facing shoulder, and means to cause longitudinal movement of the slide relatively to the body.

BERNARD JAMES STARKS.