June 3, 1924.

1,495,986

A. BUCCI

WORKHOLDING DEVICE

Filed Nov. 7, 1922

Fig. 1.

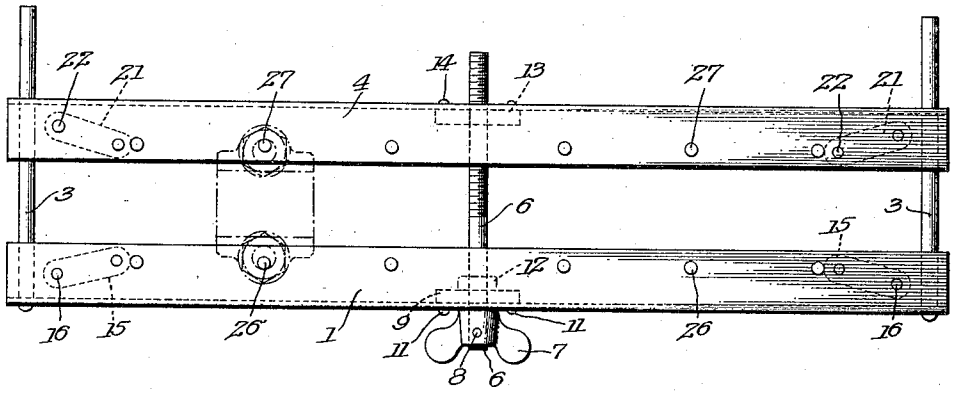


Fig. 2.

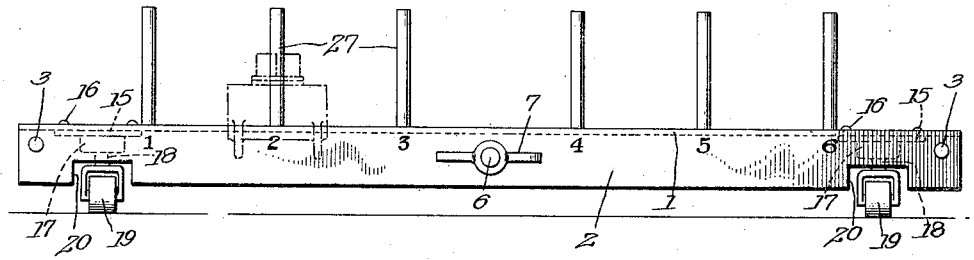
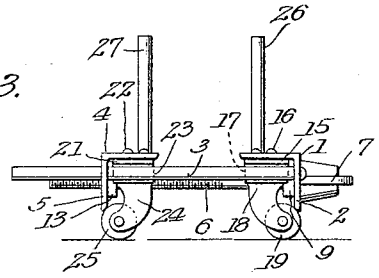


Fig. 3.



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UNITED STATES PATENT OFFICE.

ANTHONY BUCCI, OF SCHENECTADY, NEW YORK.

WORKHOLDING DEVICE.

Application filed November 7, 1922. Serial No. 599,525.

To all whom it may concern:

Be it known that ANTHONY BUCCI, a citizen of the United States, residing at 245 Park Place, in the city of Schenectady, in the county of Schenectady and State of New York, has invented certain new and useful Improvements in Workholding Devices, of which the following is a specification.

My invention relates to work-holding devices and more particularly to devices for holding metallic parts such as the bearings of automobiles, as well as the bearing nuts and shims.

An object of my invention is to provide a work-holding device which may be easily and quickly adjusted to the desired size for accommodating the work to be held.

Another object of my device is to construct a work-holder that may be easily moved without any danger of upsetting.

Another object of my invention is to provide a durable device for holding work which is easily and cheaply manufactured and has but few parts which may be easily repaired or replaced.

With these and other objects in view which may be incident to my improvements, the invention consists in the parts and combinations to be hereinafter set forth and claimed, with the understanding that the several necessary elements comprising my invention, may be varied in construction, proportions and arrangement, without departing from the spirit and scope of the appended claims.

In order to make my invention more clearly understood, I have shown in the accompanying drawings means for carrying the same into practical effect, without limiting the improvements in their useful applications to the particular constructions, which for the purpose of explanation, have been made the subject of illustration.

In the drawings:

Figure 1 is an illustration of a top plan view of my device;

Fig. 2 is an illustration of a side elevation of my device; and

Fig. 3 is an illustration of an end view of my device.

My device comprises end pieces of angle iron, one of which is mounted on supports to which it is firmly attached. The other end piece is adapted to slide on the supports to which the first mentioned end piece is attached. There is provided a wing-headed bolt which is journalled in one of the end pieces. The bolt passes through a suitable nut firmly attached to the other end piece. By this arrangement the relative positions of the end pieces may be varied by turning the wing-headed bolt with the hand. To support the device and to enable it to be moved from place to place, I have provided casters which are attached to supporting plates fastened to the underside of the angle iron forming the end pieces. To permit the casters to move freely in all directions in accordance with the motion imparted to the device in moving it from place to place, I have cut away the depending edge of the angle iron of the end pieces in proximity to the casters. This enables the shank of the caster to be made very short, whereby the center of gravity of the device is made very low.

Referring to the drawings for a more detailed description, one end piece is designated by the numeral 1. This end piece is formed of angle iron. Suitably fastened to the depending edge 2 of the end piece 1, are supports 3. Adapted to slide on the supports 3 is another end piece 4, likewise formed of angle iron, through whose depending edge 5 the supports 3 pass.

In order to cause the end piece 4 to move to and from the end piece 1, I use a screw-threaded bolt 6 having a wing-head 7 by which the bolt 6 may be manually manipulated. The wing-head 7 is keyed by means of a pin 8 to the bolt 6. To prevent the bolt 6 from slipping back and forth through the depending edge of the end piece 1, I have provided a bearing block 9 riveted to the inner surface of the depending edge 2 of the end piece 1, by means of rivets 11. Keyed to the bolt 6 is a collar 12, which is adapted to bear against the block 9. The bolt 6 is therefore held from slipping through the downwardly depending edge 2 of the support 1, in one direction by the wing-head 7, and in the other direction by the collar 12.

The other end of the bolt 6 is suitably screw-threaded and passes through an aperture in the downwardly depending edge 5 of the end piece 4. Riveted to the downwardly depending edge 5 of the end piece 4 is a screw-threaded block 13 held in place by rivets 14. The screw-threads on the bolt 6 engage with the screw-threads on the block

13, and by turning the wing-head 7 the end piece 4 may be made to slide toward and from the end piece 1.

Fastened to the underside of the support piece 1, are strengthening plates 15 which are held in place by means of rivets 16. Mounted on the plates 15 are caster bearings 17 through which project supporting shanks 18 of casters 19. In proximity to the casters 19 the downwardly depending portion 2 of the end piece 1 is cut away at points 20, as indicated in Fig. 2.

Mounted on the under surface of the support piece 4 near its ends, are strengthening plates 21 which are fastened to the end piece 4 by means of rivets 22. The strengthening plates 21 act as supports for caster bearings 23 which rotatively support the shanks 24 of casters 25. The downwardly depending portion 5 of the end piece 4 is cut away in proximity to the casters 25 to permit them to assume the necessary position in moving the support from place to place. By reason of these cut away portions of the downwardly depending edges of the end pieces, the shanks of the casters can be made very short, and the center of gravity of the device is exceedingly low.

Firmly attached to the end pieces 1 and 4, are upright holding rods 26 and 27, respectively. The upright holding rods 26 are numbered 1 to 6. This enables the workman, by properly positioning my device relative to the automobile, to keep in mind the exact position of the bearing removed. The numbering is of great assistance in reassembling the work. The bearing or other work is placed in position and firmly held by the rods. The distance between the end pieces is carefully adjusted by means of turning the wing-head 7 of the bolt 6 so that the holding-rods shall be the proper distance apart to perform their function.

The construction which I have illustrated is extremely sturdy, and by reason of its low center gravity it is practically impossible to upset it. The device has great strength but few parts.

While I have shown and described the preferred embodiment of my invention, I wish it to be understood that I do not confine myself to the precise details of construction herein set forth, by way of illustration, as it is apparent that many changes and variations may be made therein, by those skilled in the art, without departing from the spirit of the invention, or exceeding the scope of the appended claims.

I claim:

1. In an adjustable article holder, the combination with adjustable end pieces adapted to support an article and having cutaway portions therein, of casters for the end pieces opposite the cutaway portions, and means for adjusting the distance between the end pieces and holding them in the adjusted position.

2. In an adjustable article holder, the combination with adjustable end pieces of angle iron adapted to support an article whose downwardly projecting flanges have cutaway portions therein, of casters for the end pieces adapted to move through said cutaway portions, and means for adjusting the distance between the end pieces and holding them in the adjusted position.

3. In an adjustable article holder, the combination with adjustable end pieces adapted to support an article and having cut away portions therein, of upright holding rods fastened to the end pieces, casters for the end pieces opposite the cut away portions, and means for adjusting the distance between the end pieces and holding them in the adjusted position.

4. In an adjustable article holder, the combination of adjustable end pieces of angle iron adapted to support an article, whose downwardly projecting flanges have cut away portions therein, of upright holding rods fastened to the end pieces, casters for the end pieces adapted to move through said cut away portions, and means for adjusting the distance between the end pieces and holding them in the adjusted position.

5. In an adjustable article holder, the combination with adjustable end pieces, of upright holding rods fastened to the end pieces, supports to which one of the end pieces is attached and upon which the other end piece slides, and means located between the supports and equi-distantly spaced therefrom for adjusting the distance between the end pieces and holding them in the adjusted position.

6. In an adjustable article holder, the combination with adjustable end pieces having cut away portions therein, of upright holding-rods fastened to the end pieces, casters for the end pieces opposite said cut away portions, supports to which one of the end pieces is attached and upon which the other end piece slides, and a screw for adjusting the distance between the end pieces and holding them in the adjusted position.

7. In an adjustable article holder, the combination with adjustable end pieces, of upright holding rods fastened to the end pieces, supports to which one of the end pieces is attached and upon which the other end piece slides, and means for adjusting the distance between the end pieces.

In testimony whereof I affix my signature.

ANTHONY BUCCI.