PORTABLE JOURNAL JACK

Filed March 26, 1929
This invention relates to a portable jack and has relation more particularly to a device of this kind especially designed and adapted for use in jacking up journal boxes for inspection and packing, renewal of brasses and the like, and it is primarily an object of the invention to provide a device of this kind which serves to speed up what is now generally a slow and laborious operation.

Another object of the invention is to provide a device of this kind which can be readily and conveniently engaged below a journal box without any particular skill on the part of the operator and when so positioned is at once ready for a lifting operation.

A further object of the invention is to provide a device of this kind wherein the jack mechanism comprises an operating jack handle which, when the jack is not in use, serves to provide a medium to facilitate the desired transportation of the device from one location to another.

The invention consists in the details of construction and in the combination and arrangement of the several parts of our improved portable jack whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of our invention will hereinafter be definitely claimed.

In order that our invention may be better understood, we will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view in side elevation with portions broken away of a jack constructed in accordance with an embodiment of our invention;

Figure 2 is a view in front elevation of the structure as illustrated in Figure 1;

Figure 3 is a view partly in bottom plan and partly in section of the device as herein embodied.

As disclosed in the accompanying drawings, 1 denotes a base block having its forward or front wall continued by a pair of materially long and transversely spaced feet 2, each of which being relatively broad with the under or contacting surfaces flat. The kerf or slot 3 between the feet 2 has its inner end in communication with an opening or bore 4 extending through the central portion of the base 1 and substantially at right angles to the feet 2. The bore or opening 4 is continued upwardly through a column 5 herein disclosed as integrally formed with the base 1. The front face of the column 5 is provided with a slot 6 communicating with the inner portion of the kerf or slot 3 and terminating at its opposite end at a point closely adjacent to the upper or outer end of the column 5.

Slidably mounted within the bore 4 of the column 5 is a jack post 7. The lower portion of the post 7 is provided with a forwardly disposed elongated shoe 8 strengthened or reinforced by a depending web 9 formed integrally therewith and with the portion of the post 7, below the shoe. This shoe has its upper surface flat and substantially at right angles to the post 7 and is adapted to be engaged below a journal box or the like whereby said box may be lifted if desired upon upward movement of the post 7. The post 7 and shoe 8 may be readily applied into working position with respect to the column 5 and the base 1 from below as the bore 4 of the base 1 extends entirely through the base. The column 5 at a desired point above the base 1 has pivotally connected therewith, as at 10, an operating handle 11, said handle carrying a pawl 12 for engagement with the rack 14 carried by the post 7 for lifting said post upon requisite swinging movement of the handle member 11. The column 5 also carries a holding pawl 15 for coaction with the rack 14. As the means for operating the post 7 through the instrumentality of the handle member 11 forms no particular part of our invention it is not believed that a detailed description and illustration thereof is necessary.

The rear face of the base 1 at its upper portion has formed therewith and extending thereacross a block 16, the extremities of which are continued by the spindles 17. Upon each of the spindles is mounted a ground
engaging supporting wheel 18, and the lower portion of the base 1 at its rear is rounded, as at 19, for a purpose to be hereinafter more particularly referred to.

The column 5 at its upper part is provided with a laterally disposed lug or projection 20 with which is adapted to be engaged a hook member 21 pivotally mounted upon the inner end portion of the handle member 11. This hook member 21 engages the lug or projection 20 when the handle member 11 is lifted a relatively small distance above that required to effect the desired upward movement of the post 7. When the handle member 11 is held or locked to the column 5, said column may be swung rearwardly with the feet 2 and shoe 8 upwardly disposed whereby the device in its entirety may be readily and conveniently transported from one location to another. The desired up and down swinging movement of the column 5 is materially facilitated by the rounded portion 19 at the rear lower part of the base 1 as this rounded portion eliminates any hindrance or obstruction to such movement and particularly if such swinging operation should occur when the device is upon an uneven surface.

It is also to be noted that the spindles 17 are so related with respect to the under or working faces of the feet 2 as to bring said surfaces in firm contact with the ground or other support when the column 5 is substantially vertically disposed. By this means the lifting weight imposed upon the jack will be borne entirely by the column 5 and the feet 2 and not by the wheels 18.

Our improved jack is particularly designed for use in connection with journal boxes and its construction is such as to render the device readily portable, permitting it to be conveniently transported by one man from one location to another.

The construction of the jack is also such that the shoe 8 can be quickly and easily placed in desired position below a journal box, thus materially facilitating the time and labor required in inspecting the train.

From the foregoing description it is thought to be obvious that a portable jack constructed in accordance with our invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that our invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason we do not wish to be understood as limiting ourselves to the precise arrangement and formation of the several parts herein shown in carrying out our invention in practice except as hereinafter claimed.

We claim:—

In a jack structure having a standard and