Aug. 23, 1932. J. M. NEWTON 1,873,460

STORAGE BATTERY HOLDER

Filed Jan. 29, 1931

Fig. 1

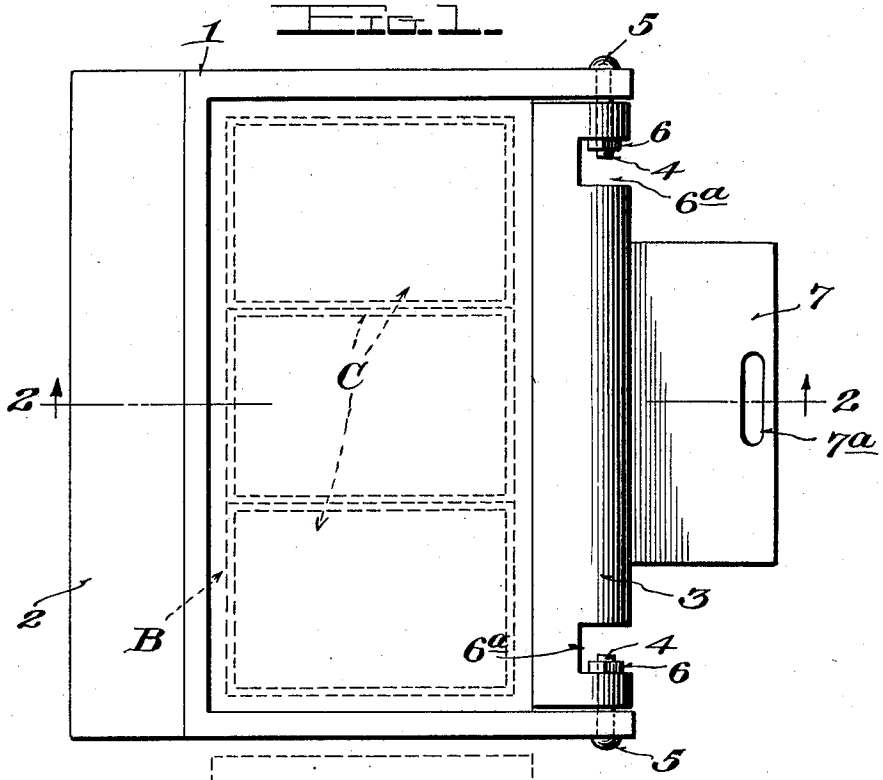
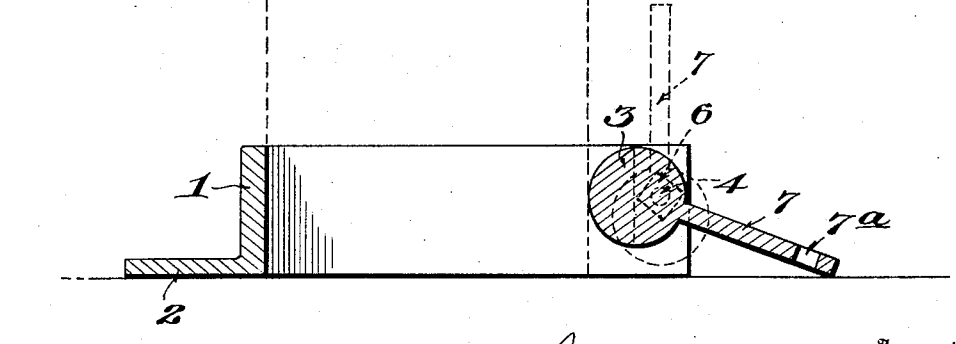


Fig. 2



Inventor

John M. Newton

By A. M. Freeman

Attorney

Patented Aug. 23, 1932 1,873,460

UNITED STATES PATENT OFFICE

JOHN M. NEWTON, OF SIOUX FALLS, SOUTH DAKOTA

STORAGE BATTERY HOLDER

Application filed January 29, 1931. Serial No. 512,186.

This invention relates to storage battery holders for use in connection with the dismantling of batteries and particularly to facilitate removal of the several cells of such batteries.

It has heretofore been proposed to provide hooks which engage the top of the battery box, but these require considerable manipulation and delay in adjustment and consequently consume time accordingly. Holders for the purpose must allow the user complete freedom of both hands at all times and yet securely and positively hold the battery box.

The primary object of the invention resides in a device which is entirely pedal or foot operated and which, when in use grips the battery box securely between its jaws, thereby to enable the box to be not only easily and quickly held in clamped position, but to also enable same to be as easily and quickly released.

A further object of the invention is to provide a storage battery holder which is simple, involves a minimum of parts, and which is inexpensive in construction and inherently rugged to withstand rough usage and the strain of operation.

Further objects and advantages will become apparent in the following detailed specification when taken with reference to the accompanying drawing in which:

Fig. 1 is a plan view of an embodiment of the present invention; and

Fig. 2 is a section on line 2—2 of Fig. 1 showing the box engaging jaws in operative position.

Referring to the drawing 1 designates a U-shaped frame preferably of cast material, such as metal or bakelite and which is formed to seat flat upon the floor or other supporting surface. The bight of the U-frame is provided with a flange 2 extending outwardly from its bottom and which is adapted to be held under the foot of the user. The inner face of the bight portion affords a battery box engaging face and acts in conjunction with an eccentrically mounted jaw 3 to clamp the battery box within the frame. The jaw 3 is preferably of circular cross section and is eccentrically held in the opening of the U-frame 1 by bolts 4, the heads 5 of which engage the sides of the U-frame, and nuts 6. The nuts 6 are disposed in slots 6*a* in the jaw 3 so that they are easily accessible for assembly and any later adjustment which may be required.

Adjustment by tightening nuts 6 furnishes sufficient binding action so that the jaw 3 will be sustained in the dotted line position of Fig. 2 by frictional contact and without being held by the user. The user therefore has both hands free to position the battery in the frame.

An integrally cast, outwardly extending foot engaging plate 7 is formed on the jaw 3 and furnishes a convenient readily accessible actuating means for the latter. A hole 7*a* is drilled adjacent the outer edge of the plate 7 so that the device may be hung up when not in use.

In operation, the jaw 3 is moved to the dotted line position of Fig. 2 wherein the plate 7 is vertically disposed. The battery B, from which the cells C are to be removed, is then lowered into the opening between the jaws. With one foot on the flange 2 the operator, using plate 7 as a lever, then brings jaw 3 into engagement by moving it about its eccentric pivot afforded by bolts 4. Obviously the greater the pressure applied by the foot of the operator to the plate 7, the more effective becomes the gripping action of the jaw 3. The battery is now held firmly in place and the operator has both hands free for the removal of the cells.

The device it will be noted involves but two main parts, one only of which is movable.

Having thus described my invention, what is claimed is:

As a new article of manufacture, a storage battery holder, composed of a substantially U-shaped frame having its bottom formed to seat on a supporting surface, the bottom of the frame being open so as to receive the storage battery therein whereby to also support the battery from said surface, a foot engaging flange extending outwardly from the bight side of the frame and formed to seat on the supporting surface whereby the frame

is held against the supporting surface by one foot of the operator, a cylindrical-like jaw mounted in the opening of the frame and having its end faces disposed adjacent to the ends of the frame at the opposite side of the latter, said jaw having slots adjacent to its ends and spaced therefrom, bolts extending through the said last named ends of the frame and extending eccentrically through said ends of the jaw and into the slots, and a foot-engaging plate carried by the jaw and extending outwardly therefrom.

In testimony whereof I affix my signature.

JOHN M. NEWTON.