No. 806,672. PATENTED DEC. 5, 1905.

S. HUNZIKER.

BRICK GRAPPLE.

APPLICATION FILED MAR. 24, 1905.

FIG. 1.

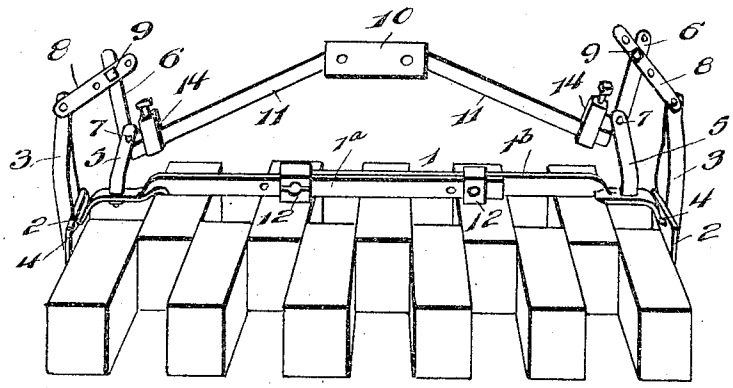


FIG. 2.

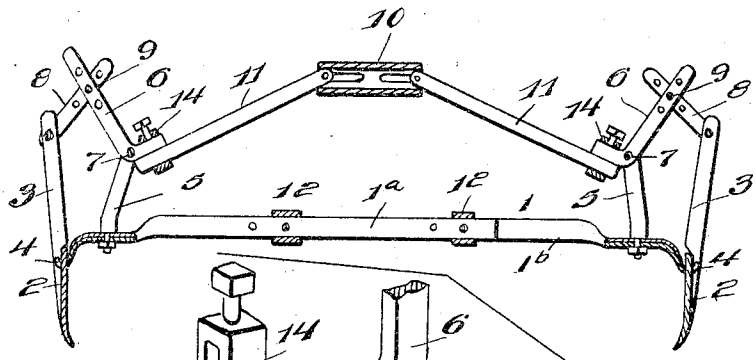


FIG. 3

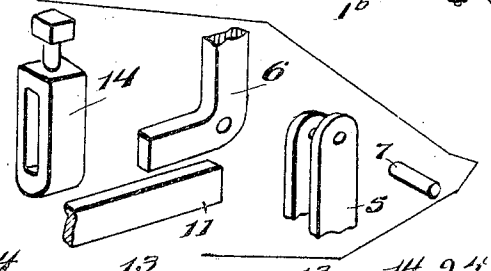
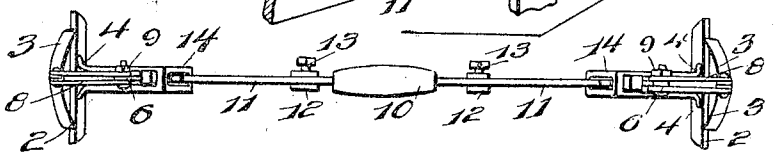


FIG. 4.



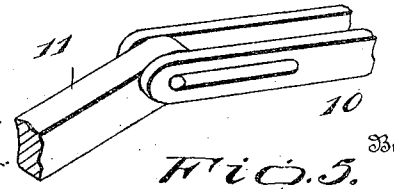


FIG. 5.

Witnesses
W. P. Woodson
J. H. Johnston

Inventor
S. Hunziker

By R. A. B. Lacey, Attorneys

UNITED STATES PATENT OFFICE.

SAMUEL HUNZIKER, OF SUTTON, NEBRASKA.

BRICK-GRAPPLE.

No. 806,672. Specification of Letters Patent. Patented Dec. 5, 1905.

Application filed March 24, 1905. Serial No. 251,844.

To all whom it may concern:

Be it known that I, SAMUEL HUNZIKER, a citizen of the United States, residing at Sutton, in the county of Clay and State of Nebraska, have invented certain new and useful Improvements in Brick-Grapples, of which the following is a specification.

This invention embodies a simple and extremely serviceable device for handling bricks, building-blocks, or the like; and it consists, essentially, of a grapple adapted to engage a number of bricks to hold the same together as they are lifted and conveyed from one place to another.

Generally speaking, the invention comprises, essentially, opposing jaws designed to directly engage bricks, a handle, and a peculiar connection between the handle and jaws whereby when the device is lifted the jaws will be actuated so as to firmly clamp and hold a number of bricks as the latter are being carried.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a perspective view showing the invention as when in actual use. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a top plan view. Fig. 4 is a perspective view showing the means for connecting the link-bars and bell-crank levers. Fig. 5 is a detail perspective view of the link-bar broken away and connecting means between the same and the handle.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In carrying out the invention a supporting-bar 1 is utilized, jaws 2 being carried at opposite ends of said bar. Arms 3 project upwardly from the jaws 2, and said arms preferably embody spaced members suitably attached to the jaws. The jaws 2 are provided at the upper portions thereof with openings through which hooks 4, two of which are projected from each end of the bar 1, pass, said hooks curving upwardly and affording pivotal connection between the jaws and said bars. Short standards 5 are projected upwardly from the end portions of the bar 1 adjacent the jaws 2, and these standards 5 are preferably bifurcated, so as to receive bell-crank levers 6 therebetween. Pivots 7 pass through the upper extremities of the standards 5 and the levers 6. The upper arm of each lever 6 is connected by a link 8 with the upper extremity of the arm 3 of the adjacent jaw, connected end portions of the members 8 and 6 being provided with a plurality of openings to enable the pivotal fastenings 9 between these parts to be adjusted. A handle 10 is arranged above the bar 1 approximately intermediate its end, and this handle is preferably of hollow or tubular construction. Link-bars 11 have pivotal connection at one end with the handle 10, said handle receiving the end portions of the bars in the hollow or tubular portion thereof. The link-bars 11 have the outer ends thereof connected with the lower arm of the lever 6, so that when the handle 10 is pulled upwardly pivotal movement will be imparted to the lever 6, which will force the arms 3 outwardly at their upper ends and cause the jaws 2 to move toward each other.

In actual use the operator places the device over a row of bricks—say ten in number—and the jaws 2 are placed with the inner sides thereof against the outer sides of the end bricks of the ten which are to be lifted and carried from one place to another. Grasping the handle 10 the operator pulls the same upwardly, and thereby imparts a pivotal movement to the jaws, causing the same to firmly engage and clamp against the bricks, whereupon the whole device may now be raised, the bricks arranged between the jaws 2 being lifted therewith because of the clamping action of the members 2 aforesaid. The jaws 2 will firmly hold the bricks therebetween until the latter are deposited, when the downward movement on the handle will separate the jaws 2 and enable the device to be disengaged from the bricks to be used again in the same manner as before described. The operation of the device is such that the bricks to be moved may be very quickly engaged and lifted from the row in which they are arranged, this forming an essential feature of advantage in the actual use of the invention.

In order that a greater or less number of bricks may be lifted at the same time, it is designed to make the bar 1 of the device expansible, and for this purpose the bar 1 is made in two sections, (designated 1^a and 1^b.) Clamping-sleeves 12 receive the end portions of the sections 1^a and 1^b of the bar 1 and are

adapted to be adjusted so as to permit of lengthening and shortening of the bar, said sleeves having set-screws 13 for adjusting the same, as above mentioned. It will thus be seen that the bar 1 may be shortened or lengthened to enable the jaws 2 to receive a greater or less number of bricks therebetween, so that the device may be used by persons of more or less strength and according to the desire of the operator. To accommodate for the adjustment of the sections of the bar 1, it is necessary that the links 8 be made adjustable, as heretofore described, and the link-bars 11 also have adjustable connection with the lower arms of the crank-levers 6. Clamp-sleeves 14 are adapted to embrace the lower arms of the levers 6 and the adjacent ends of the link-bars 11 in order to admit of adjustable connection of these members. The degree of movement of the jaws 2 may of course be varied by adjustment of the connection between the members 8 and 6 in a manner which will be obvious.

Having thus described the invention, what is claimed as new is—

1. In a grapple, the combination of a bar, jaws movably mounted upon said bar, means for adjusting the jaws toward and from each other, a handle, and levers connected with the handle and having adjustable connection with the jaws aforesaid.

2. In a brick-grapple, the combination of a bar, jaws movably mounted at the ends of the bar, a handle, and bell-crank levers operably connecting the handle with the jaws.

3. In a brick-grapple, the combination of a bar, jaws pivoted to the ends of the bar, a handle, levers carried by the bar and connected with the handle and links connecting the levers with the jaws.

4. In a brick-grapple, the combination of a bar, jaws pivoted to the ends of the bar, a handle, levers pivoted to the bar, links connecting the levers with the jaws, and link-bars connecting the handle with the levers.

5. In a brick-grapple, the combination of an expansible bar, jaws pivoted to the ends of the bar, a handle, and levers connected with the handle and having adjustable connection with the jaws.

6. In a brick-grapple, the combination of an expansible bar, jaws pivoted to the ends of the bars, arms projecting upwardly from the jaws, standards projecting upwardly from the bar near the end portions thereof, levers pivoted to the standards, links connecting the levers with the arms of the jaws, a handle, and link-bars adjustably connecting the levers with the handle.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL HUNZIKER. [L. S.]

Witnesses:
R. M. THOMPSON,
W. E. THOMPSON.