H. C. BELL

Lever Power.

No. 168,601. Patented Oct. 11, 1875.

Fig. 1

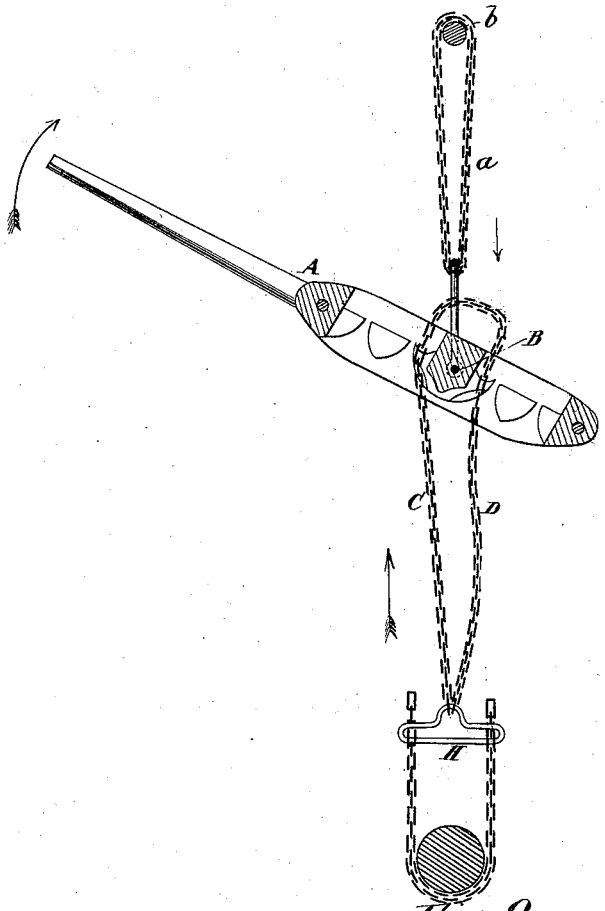


Fig. 3.

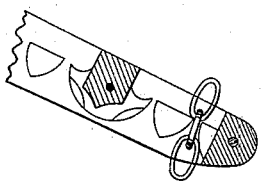
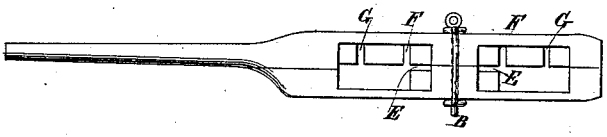


Fig. 2



WITNESSES:

A. W. Almquist

A. F. Terry

INVENTOR:

Henry C. Bell

BY

Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY C. BELL, OF EDINA, MISSOURI.

IMPROVEMENT IN LEVER-POWERS.

Specification forming part of Letters Patent No. **168,601**, dated October 11, 1875; application filed September 4, 1875.

To all whom it may concern:

Be it known that I, HENRY C. BELL, of Edina, Knox county, Missouri, have invented a new and Improved Lever-Power, of which the following is a specification:

The main feature of my invention is a vibrating lever, provided with notches or sockets, adapted for receiving the links of chains, which, in practice, pass around or otherwise connect with the object to be raised. The lever is suspended and vibrated on a central pivot, so that the hoisting-chains are alternately slackened and subjected to strain, each chain being shortened when slack, as hereinafter described.

Figure 1 is a sectional side elevation; Fig. 2, a top view of my improved lever-power; Fig. 3, a detail view.

A is the lever, which is suspended on a pivot, B, by means of a chain, *a*, connected with any suitable support, *b*. C and D represent the hoisting-chains; and E, F, and G, notches or open slots to receive the chain-links, as shown. These notches are formed in the side walls of recesses, formed one on each side of the pivot B, and are of such width as adapts them to admit links of the chains C D, but will not permit the joints of the links to pass through. Said notches are widened at the bottom to permit the vibration of the lever without crowding the chains. Notches E F are for the links of different shape, and notches G are for a longer purchase. In other words, for lifting heavy weights, I require a short purchase, and hence place the chain-links in notches E or F. Light weights may be raised with greater rapidity by placing the chain-links in notches G, since such notches vibrate through a greater arc than notches E or F. When one of the hoisting-chains is slack, say chain D, as shown in Fig. 1, it may be detached from the slot and drawn up through the slot in lever A till it becomes taut, and another link is inserted in the notch and the lever depressed. The other chain—say C—will then become slack, and may be similarly drawn taut and readjusted in the same notch as before. This operation will be continued until the shortening of chains C D has raised the object to the desired height.

What I claim is—

The combination of lever A, having a chain-link notch or notches on each side of pivot B, a suspending-chain, *a*, and hoisting-chains C D, all as shown and described, to operate as specified.

HENRY C. BELL.

Witnesses:

F. W. GIFFORD,

ARNOLD DAVIDSON.