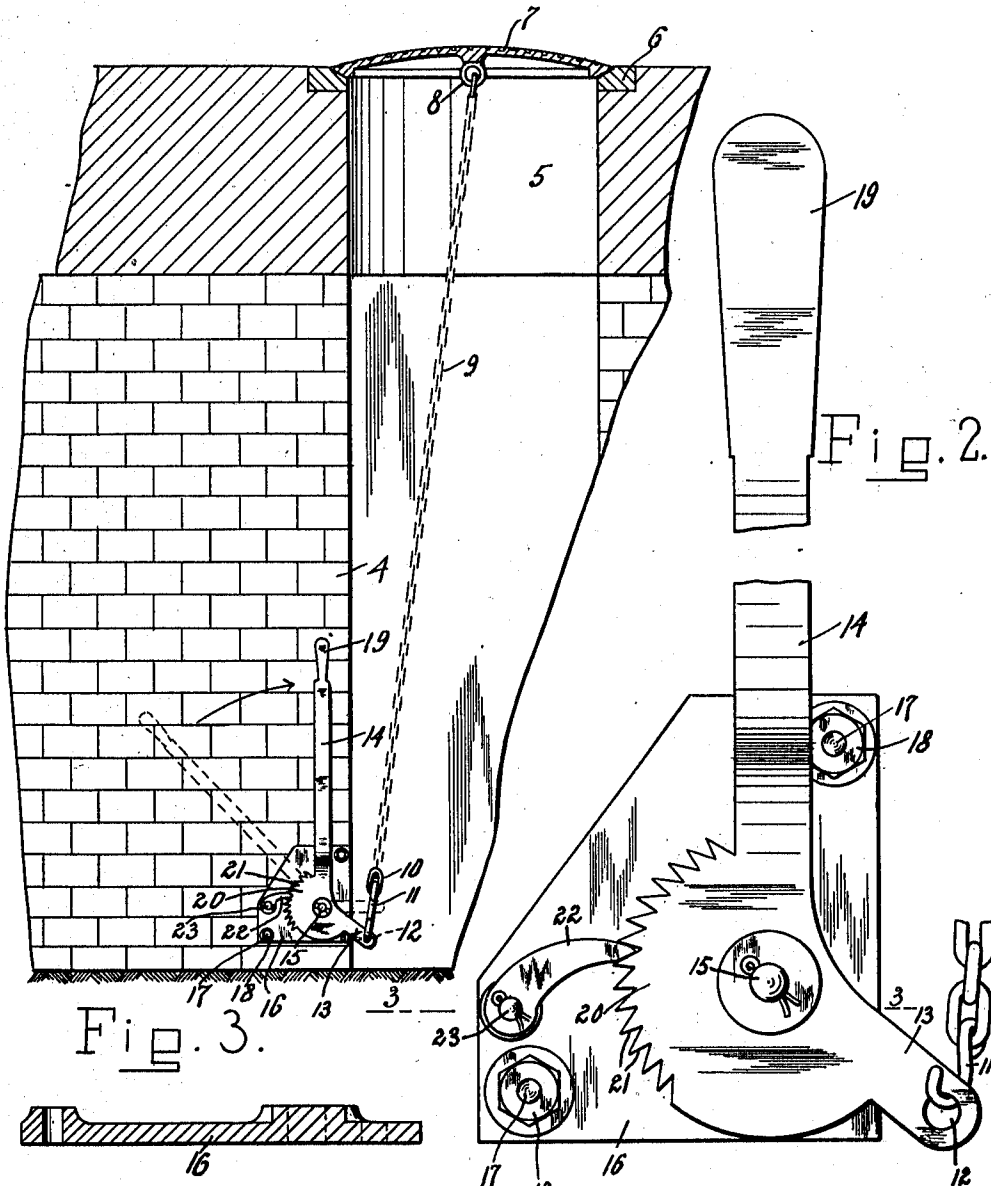


J. BRAUN.
 LOCKING DEVICE FOR COAL HOLE COVERS.
 APPLICATION FILED JULY 6, 1911.

1,003,695.

Patented Sept. 19, 1911.

Fig. 1.



WITNESSES
W. Klink
S. Kirsbaum

INVENTOR
Joseph Braun
 by *Symund Herzig*
 his ATTORNEY

UNITED STATES PATENT OFFICE.

JOSEPH BRAUN, OF NEW YORK, N. Y.

LOCKING DEVICE FOR COAL-HOLE COVERS.

1,003,695.

Specification of Letters Patent.

Patented Sept. 19, 1911.

Application filed July 6, 1911. Serial No. 637,070.

To all whom it may concern:

Be it known that I, JOSEPH BRAUN, a subject of the King of Hungary, and resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Locking Devices for Coal-Hole Covers, of which the following is a specification.

The present invention relates to improvements in locking devices for coal-hole covers or scuttles, and has for one of its objects to provide a device of this character which is simple in construction, and by means of which the cover can be easily and effectively locked in position so as to prevent the displacement thereof by walking upon the same or the removal thereof by persons trying to enter the basement or cellar of the house through the coal-hole, or the house through the scuttle in the roof.

With these and other objects in view, which will more fully appear as the nature of the invention is better understood, the same consists in the combination, arrangement and construction of parts hereinafter fully described, pointed out in the appended claims and illustrated in the accompanying drawings, it being understood that many changes may be made in the size and proportion of the several parts and minor details of construction without departing from the spirit or sacrificing any of the advantages of the invention.

One of the many possible embodiments of the invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a vertical section taken through a coal-hole cover provided with the locking means forming the subject matter of the present invention; Fig. 2 is a front elevation of the locking means, and Fig. 3 is a section taken on line 3—3 of Fig. 1.

In the drawings a locking device for a coal-hole cover has been shown, but it will be observed that the locking means can be easily made use of in connection with covers of scuttles in the roof of the house.

In the drawings, the numeral 4 indicates the wall of the basement of the house, the coal-hole being indicated by the numeral 5. Flush with the level of the sidewalk is arranged around the edge of said hole a seat 6, upon which the cover 7 is held. The inner surface of the cover is provided with an eye 8, in engagement with the uppermost

link of a chain 9, to the lowermost link 10 of which is fastened a, preferably, hook-shaped member 11. This hook engages an aperture 12 in the arm 13 of a bellcrank lever 14, which latter is fulcrumed at 15 to a base plate 16. The base plate is held, for instance, by means of bolts 17 and nuts 18 upon the wall of the basement or cellar of the house. The free end of the bellcrank lever 14 is provided with a handle 19 for well known reasons. With the bellcrank lever is made integral a gear segment 20, provided with ratchet teeth 21, which are adapted to be engaged by a pawl 22, the latter being fulcrumed at 23 to the base plate 16. The teeth 21 are of such shape that they will permit the bellcrank lever to be shifted around its fulcrum in the direction of the arrow shown in Fig. 1 of the drawings, but will prevent the same from turning in a direction opposite to that of the arrow.

It will be observed that the gear segment, with its ratchet teeth, need not be necessarily made integral with the bellcrank lever but may be attached in any manner known in the art.

The operation of this device is as follows: When the parts are in the positions shown in Figs. 1 and 2 of the drawings, the chain 9 is held taut, whereby the cover is securely locked in position. When it is intended to remove the cover, the pawl 22 is disengaged from the ratchet teeth, and the handle 19 of the bellcrank lever 14 shifted in a direction opposite to that of the arrow shown in Fig. 1 of the drawings until the bellcrank lever occupies the position shown in dotted lines in Fig. 1. The lower end of the chain is by these operations brought nearer to the upper end of the same so that the hook 11 can be easily disengaged from the aperture in the arm 13 in the bellcrank lever. To lock the cover, of course, the reverse operations are necessary, that is, first the hook 11 is engaged with the arm 13 of the bellcrank lever, the pawl engaged with the ratchet teeth of the gear segment, after which the handle 19 of the bellcrank lever is shifted to the right until the chain 9 is drawn taut.

It will be observed that the degree of tautness of the chain depends upon the position of the bellcrank lever, that is to say how far the same had been shifted to the right.

What I claim is:—

1. In a locking device for coal-hole covers, the combination with a base plate, of a bellcrank lever fulcrumed thereto having upon
5 its longer arm a handle and an aperture in its shorter arm, a chain depending from a coal-hole cover, a hook secured to the lowermost link of said chain adapted to engage
10 said aperture, a ratchet wheel segment upon said bellcrank lever, and a pawl pivoted to said base plate adapted to mesh with the teeth of said segment, substantially as and for the purpose specified.
2. In a locking device for coal-hole covers,
15 the combination with a base plate, of a bellcrank lever fulcrumed thereto having upon

its longer arm a handle and an aperture in its shorter arm, a chain depending from a coal-hole cover, a hook secured to the lowermost link of said chain and adapted to engage said aperture, and coacting means carried by said base plate and said bellcrank lever for holding the latter in predetermined positions, substantially as and for the purpose specified. 20 25

Signed at New York, in the county of New York and State of New York, this 5th day of July, A. D. 1911.

JOSEPH BRAUN.

Witnesses:

SIGMUND HERZOG,
S. BIRNBAUM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."