G. W. BISHOP.

Stone-Gatherer.

No. 20,774. Patented July 6, 1858.

Fig. 1.

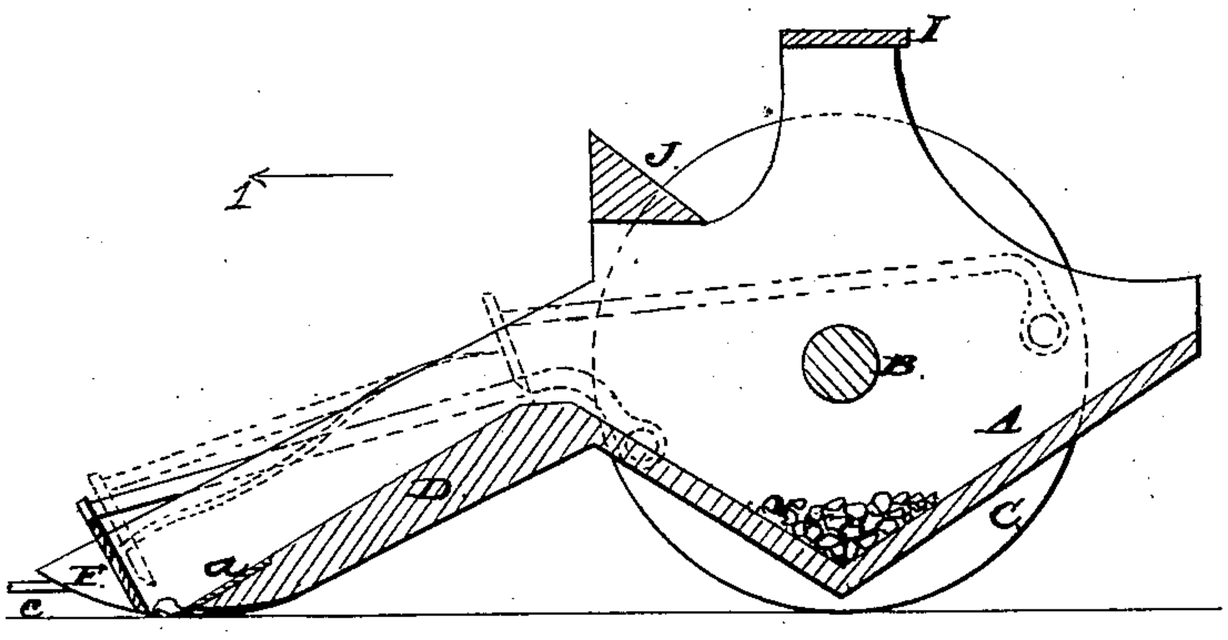


Fig. 2.

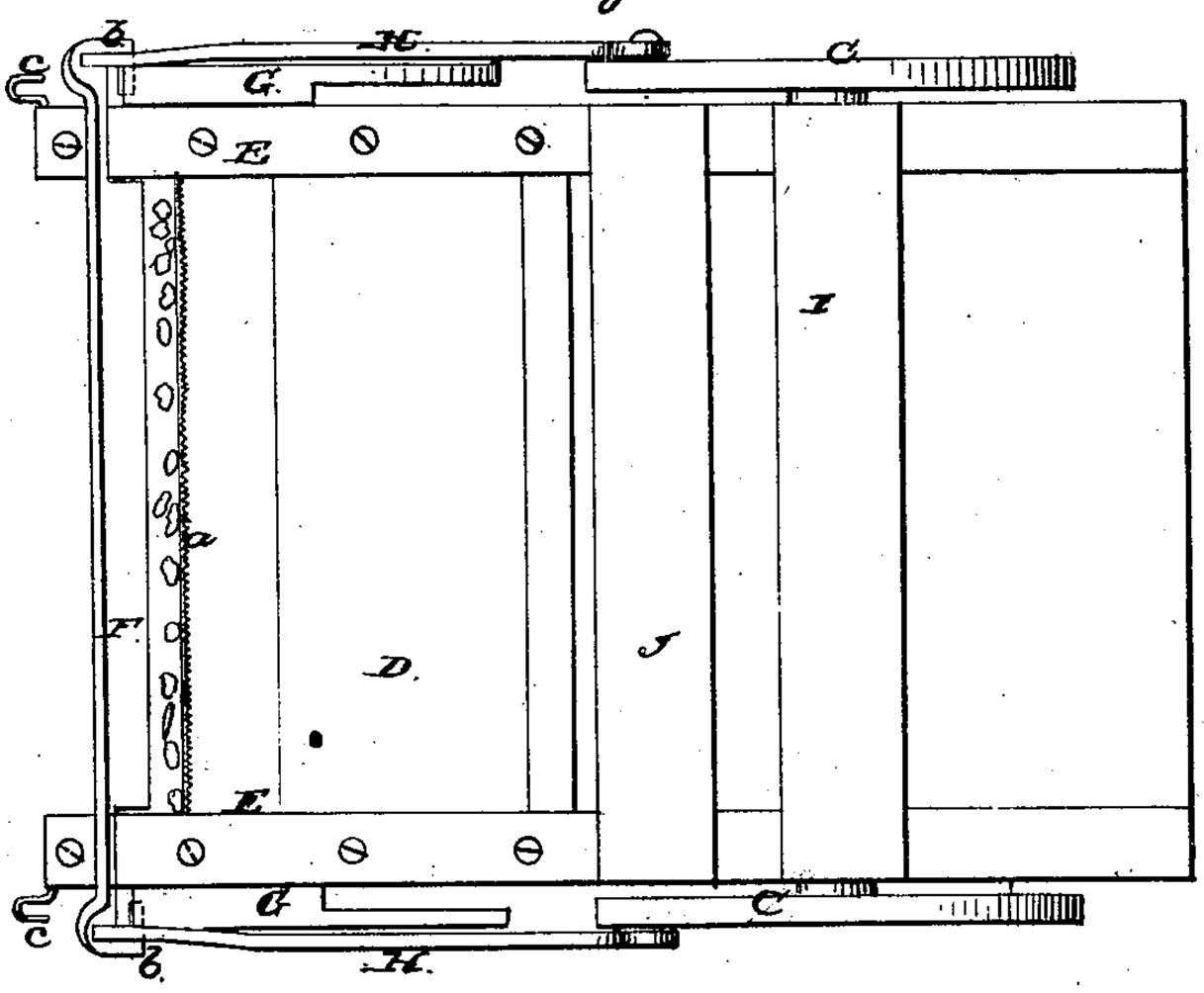
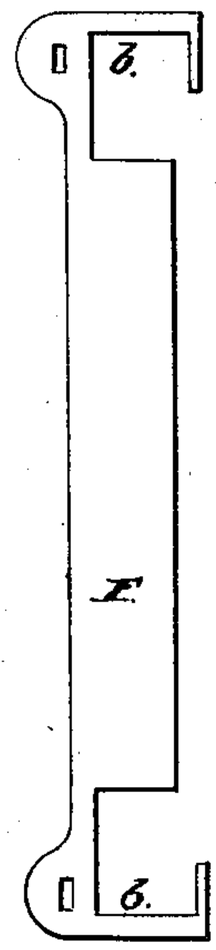


Fig. 3



UNITED STATES PATENT OFFICE.

G. W. BISHOP, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN MACHINES FOR GATHERING STONES.

Specification forming part of Letters Patent No. **20,774**, dated July 6, 1858.

To all whom it may concern:

Be it known that I, G. W. BISHOP, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Device for Picking or Gathering Stones from the Field; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section of my invention, the plane of section passing through the center. Fig. 2 is a plan or top view of same. Fig. 3 is a detached face view of the reciprocating scraper.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in having a receptacle or box mounted on wheels and having an inclined plane at its front end, the wheels of the receptacle or box having rods attached, said rods being connected to a scraper which works over the inclined plane, and which scraper, by means of springs or drop-guides, in connection with the rods aforesaid, is made as the machine is drawn along to draw up the stones into the receptacle or box.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the receptacle or box, which transversely may be of **V**-shape, having an axle, B, passing longitudinally through it at about its center.

C C are the wheels of axle B.

To the front end of box A an inclined plane, D, is attached, the inner and upper end of the plane being secured to the upper end of the front side of the box A, as shown plainly in Fig. 1. The lower end of the plane D is shod or has a metal plate, *a*, attached, the edge of which is serrated, as shown clearly in Fig. 2, the plane D, as well as the box A, being of wood. At each end of the plane D there is an inclined ledge, E, the upper surfaces of which are covered or faced with metal.

F is a scraper, which is constructed of metal, and provided at each end with a hook-shaped shank, *b*. (See Figs. 2 and 3.) The blade of the scraper F fits between the two ledges E E, the upper parts of the shanks *b* extending over the ledges and resting upon them during the upward movement of the scraper.

To each side of the plane D there is attached a spring-guide, G. These guides are constructed of metal, and are of curved form, as shown clearly by the dotted lines in Fig. 1. The spring-guides G are of such width that they may fit within the hooked shanks *b*. (See Fig. 2.)

To the front end of the plane D draft-hooks *c* are attached, one to each side, and to each end of the scraper F a rod, H, is attached. The rods H are connected at their opposite ends to the wheels C, near their peripheries.

On the upper part of the box A a seat, I, is placed; and J is a foot-rest, also placed on the box A, below the seat I.

The operation is as follows: The horse is attached to the front end of the plane D, the driver being on seat I. As the machine is drawn along in the direction indicated by arrow 1 a reciprocating motion is given the scraper F. As the scraper is moved upward the upper parts of the shanks *b* rest on the upper surfaces of the ledges E E, and the lower edge of the scraper is close down to the surface of the plane. When, however, the scraper has been drawn fully upward, or as it reaches the end of its backward stroke, the lower parts of the shanks *b* will pass above the upper and back ends of the spring-guides G, and during the downward or forward stroke of the scraper it is elevated above the surface of the plane D, as shown in red, Fig. 1, the elevation being caused by the lower parts of the shanks resting on the top of the spring-guides G. As the lower parts of the shanks pass off from the spring-guides G the scraper F falls on the ground a little in front of the plate *a*, and as it ascends or moves up the plane D all stones that the plate *a* may have scraped up at its lower end are drawn up and deposited in the box A.

This machine will prove valuable for moving small stones from fields preparatory to tilling them. By its use the work may be rapidly done and with a comparatively small amount of labor.

I would remark that instead of the spring-guides G drop-guides may be used. They,

however, would be equivalent to the spring-guides.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The box A, provided with the inclined plane D, and used in connection with the reciprocating scraper F and spring-guides G G, or their equivalents, the whole being arranged to operate as and for the purpose set forth.

G. W. BISHOP.

Witnesses:
W. TUSCH,
J. W. COOMBS.