

BREWSTER & HINES.

Stone-Gatherer.

No. 45,970

Patented Jan. 24, 1865.

Fig. 1.

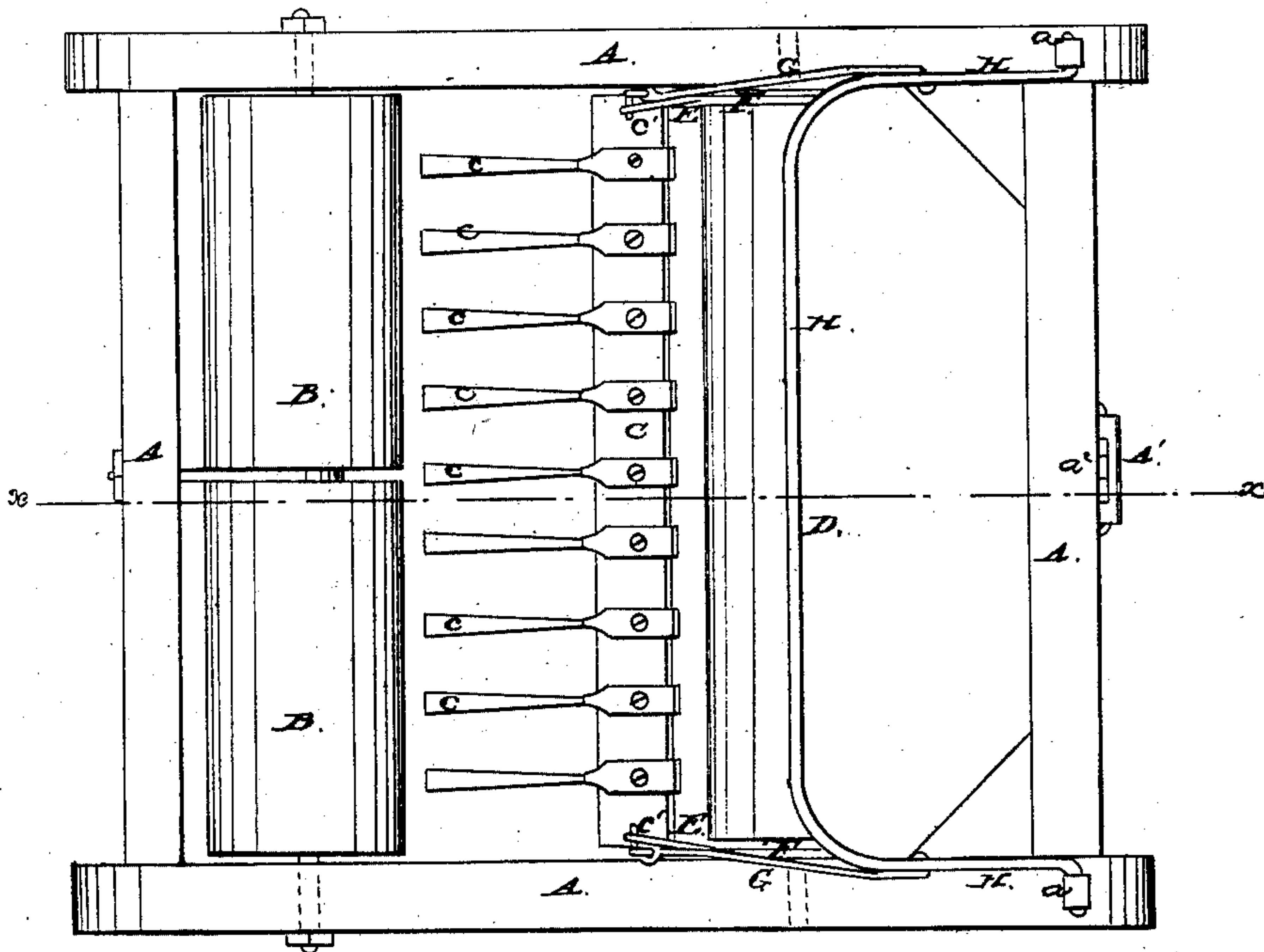
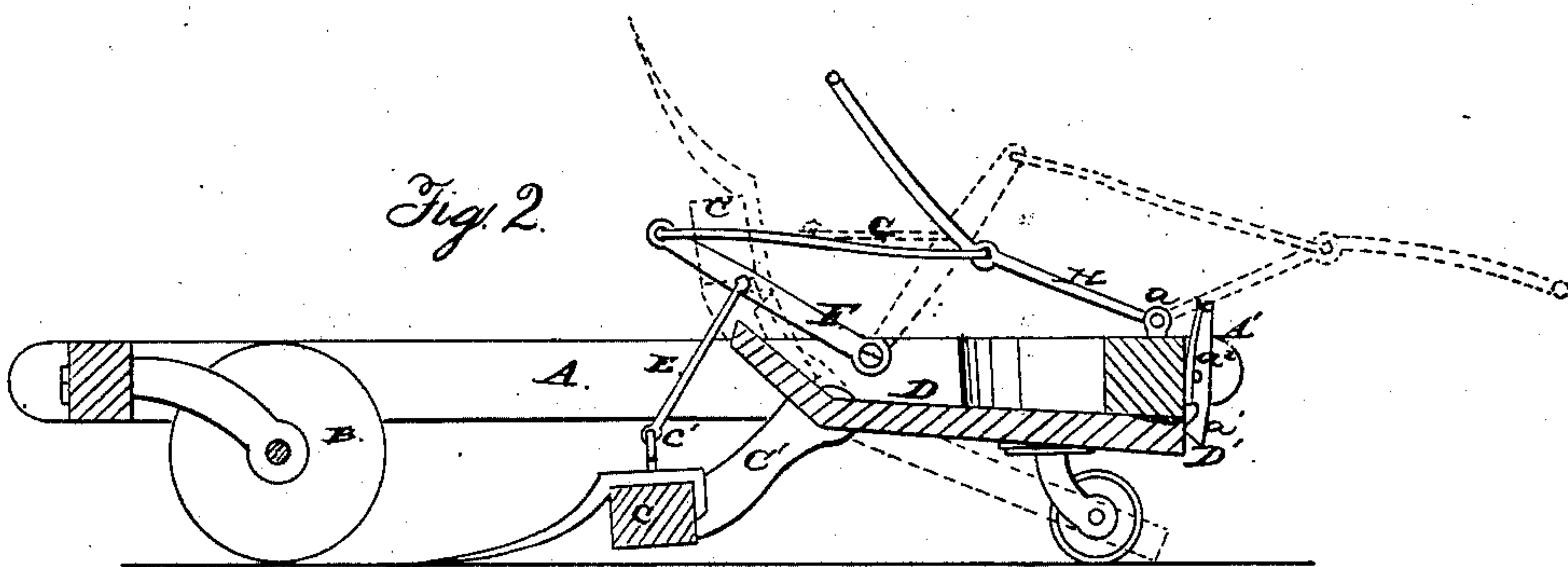


Fig. 2.



witnesses.

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UNITED STATES PATENT OFFICE.

C. M. HINES AND P. S. BREWSTER, OF LIME HILL, PENNSYLVANIA.

IMPROVED STONE-GATHERER.

Specification forming part of Letters Patent No. 45,970, dated January 24, 1865.

To all whom it may concern:

Be it known that we, C. M. HINES and P. S. BREWSTER, of Lime Hill, in the county of Bradford and State of Pennsylvania, have invented a new and useful Improvement in Stone-Gatherers; and we do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan of our improved machine. Fig. 2 is a vertical section of the same, the plane of section being indicated by the line x , Fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists chiefly in novel means for operating a pivoted bar which is provided with fingers or teeth to gather the stones.

It also consists in the use of a peculiar dumping platform or receiver, into which the stones are deposited by the aforementioned fingers.

It further consists in the employment of rollers to prevent injury to the gatherers, all as will be herein fully described.

The following description will enable others skilled in the art to which our invention appertains to fully understand and use the same.

In the accompanying drawings, A may represent a rectangular frame, in the forward end of which are journaled rollers B B. Following the rollers are fingers c , fixed to a bar, C, by screws or otherwise, and located sufficiently near each other to retain upon them the stones which it is desired to remove from the ground and under which they pass as the machine moves forward. At its respective ends the bar C carries arms C' C', which are pivoted to the sides of the frame A to permit the bar C with its fingers to be thrown up to a backwardly-inclined position, so as to permit the stones to fall onto a platform or receiver, D, which may be sustained by the pivots upon which the arms C' turn.

E E are rods connected to eyes c' at the ends

of the bar C, and to levers F F, pivoted to the respective sides of the frame A.

G G are rods connected to the levers F and to a bail or handle, H, turning in sockets a , inserted in the frame A, near the rear end thereof. The platform D extends under the beam of the frame A, with its rear edge flush with said beam, and catches a' on a lock-bar, A', are adapted to engage beneath a metallic plate, D', fixed to the rear end of the platform D. By drawing forward the bar A' the catches a' , which are shaped somewhat like a figure 4, may be disengaged from the plate D' to permit the rear end of the platform to fall, when the stones will be deposited upon the ground in a heap. The platform, after discharging its load, may be returned to its normal position by the pressure of the foot upon its forward end. A spring, a^2 , permits the catches to yield to the upward pressure of the platform, and then causes the catches to take beneath the plate D' and retain the platform in its receiving or normal position.

As the stones accumulate from time to time on the fingers c , the driver, who may stand upon the rear beam of the frame A, takes hold of the bail H, and by drawing it backward raises the bar C and fingers c , and causes the latter to assume an inclined position about parallel with the upturned front of the platform D, when the stones will roll or fall onto said platform by gravitation. The employment of the levers F in connection with the rods E G enables the operator to raise a quantity of stones of considerable weight with comparatively slight exertion.

The rollers B B, extending across the front of the machine, are adapted to raise the same in passing over large stones, and thus prevent injury to the fingers c .

Having thus described our invention, the following is what we claim as new herein and desire to secure by Letters Patent:

1. The pivoted bar C, provided with gathering-fingers c , and operated by means of the bail H, levers F, and rods E G, substantially in the manner herein described.

2. The platform D, in combination with the lock-bar A' a', spring a², and plate D', when the whole are employed in conjunction with the gatherers C c in the manner and for the purposes explained.

3. In combination with the gatherer C c, the rollers B B, extending across the machine to raise the fingers over stones too large to be lifted by them, substantially as set forth.

The above specification of our improvement

in stone-gatherers signed by us in presence of subscribing witnesses.

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P. S. BREWSTER.

Witnesses to signature of C. M. Hines:

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Witnesses to signature of P. S. Brewster:

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