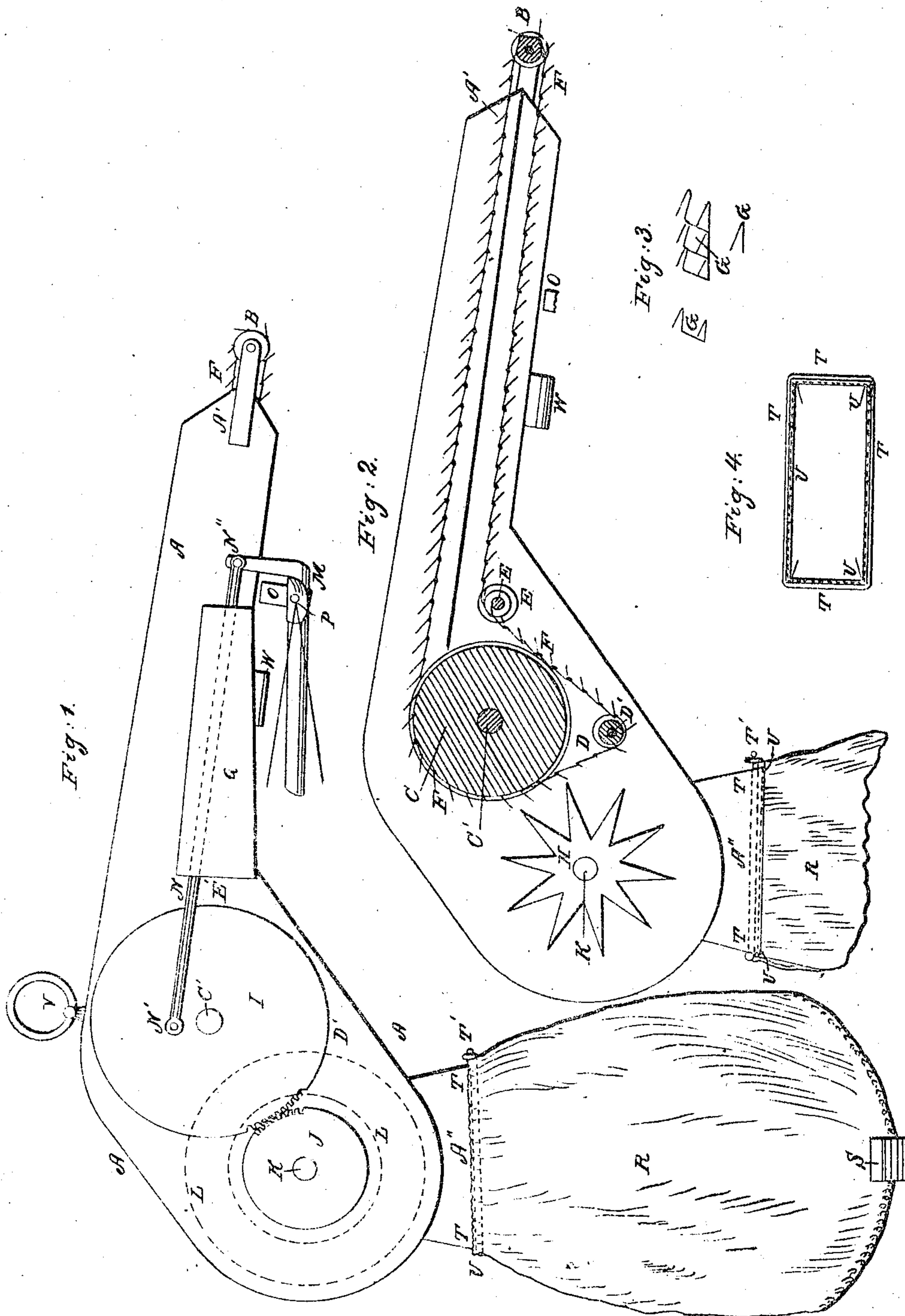


G. A. HOWE.
Cotton Harvester.

No. 13,877.

Patented Dec. 4, 1855.



UNITED STATES PATENT OFFICE.

GEO. A. HOWE, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN HAND COTTON-PICKERS.

Specification forming part of Letters Patent No. 13,877, dated December 4, 1855.

To all whom it may concern:

Be it known that I, GEORGE A. HOWE, of Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Hand Cotton-Picker; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a view of the hand cotton-picker, and Fig. 2 a longitudinal section. Figs. 3 and 4 are detached sections, which will be referred to in description.

Like letters refer to like parts in the different views.

A A A represent the exterior of the machine; B C D E, rollers upon and around which the chain F revolves. This chain F is made by bending wires into the form of those seen in Fig. 3.

G G represent one of the links or wires detached, and G' a section of the chain in which the legs of one of the links are caught or hooked into the middle of the next. When the chain is of sufficient length the ends of the two extreme links are caught or hooked together, thus making an endless chain of pickers or gatherers. A belt of card-teeth may be substituted for the chain.

The roller B is placed at the outer end of the tubular part A' of the machine, where it revolves upon a shaft, as do the other rollers, C, D, and E, upon their respective shafts C', D', and E'. As the chain passes from the roller C to the roller D it comes in close proximity to the wheel H, Fig. 2, which acts as a stripper to the chain as it is carried backward filled with cotton.

Upon the shaft C' is a gear, I, which meshes into a smaller gear, J, upon the shaft K of the stripper H, by means of which the stripper is revolved faster than the chain, and in the same direction as the lower part of the chain, as it is carried forward after being relieved of the cotton.

The dotted lines L, Fig. 1, represent a fly or balance wheel, which is secured to the other end of the shaft K, and which revolves in a cap connected to the side of the machine. The gears I and J are also protected by a case or cover in a similar manner. The large gear

I is connected to the right-angled lever M by the rod N by means of a joint at N' and at N''. The lever M has a pin-joint, P, which acts as a fulcrum in the standard O, which standard is secured to the case or tube. By the action of the lever M, in combination with the rod N, the gear I is revolved, by which means the movements are given to the machine.

Q represents a case or covering through which the connecting-rod N passes. If considered preferable, the gear I may be revolved by a pin or handle secured to it at N', instead of the lever and connecting-rod.

The throat A'' of the machine is made flaring, and to it is attached the bag R, which is so constructed that by removing the clasp S the two sides at the bottom will open and allow the contents to fall. In the edges of the bottom of the bag are sewed wires, which keep the bag extended in shape and the clasp in place. The bag R is secured to the flaring throat A'' by the spring-clasp T, which is sewed to the top of the bag. This clasp is provided with a hook and eye at T', which aids in retaining it in place above the bead or projection U, and thus the bag is prevented from slipping down. The bag may be removed from the machine by unclasping the hook and eye at T'.

Fig. 4 is a view of the throat A'' inverted, with the clasp around it and the bag removed.

The ring V is secured to the top of the machine, and through this ring is passed a strap, by which the machine is suspended from the shoulders.

To operate the picker the strap which is passed through the ring V is put over one shoulder and under the opposite arm, the machine being well drawn up under the arm. The arm is then extended, the thumb placed in the ring W, secured to the under part of the machine, and the hand-lever N operated. The roller B, which is placed at the extremity of the tubular part of the machine, is then brought in contact with the cotton-boll and the cotton picked out by the chain of pickers or gatherers and carried by it into the machine. As the chain passes the stripper H the cotton is detached and falls through the throat A'' into the bag R, and when the bag becomes

full it is opened, as described, and the cotton emptied.

What I claim as new and my invention, and which I desire to secure by Letters Patent, is—

The endless belt or chain of gatherers F, stripper H, bag R, and case A A, when com-

bined, arranged, and operated substantially in the manner and for the purpose herein set forth and described.

GEORGE A. HOWE.

Witnesses:

W. H. BURRIDGE,
L. E. CORNWALL.