

W. H. APPERLY.
COTTON PICKER.

No. 106,022.

Patented Aug. 2, 1870.

FIG. 1.

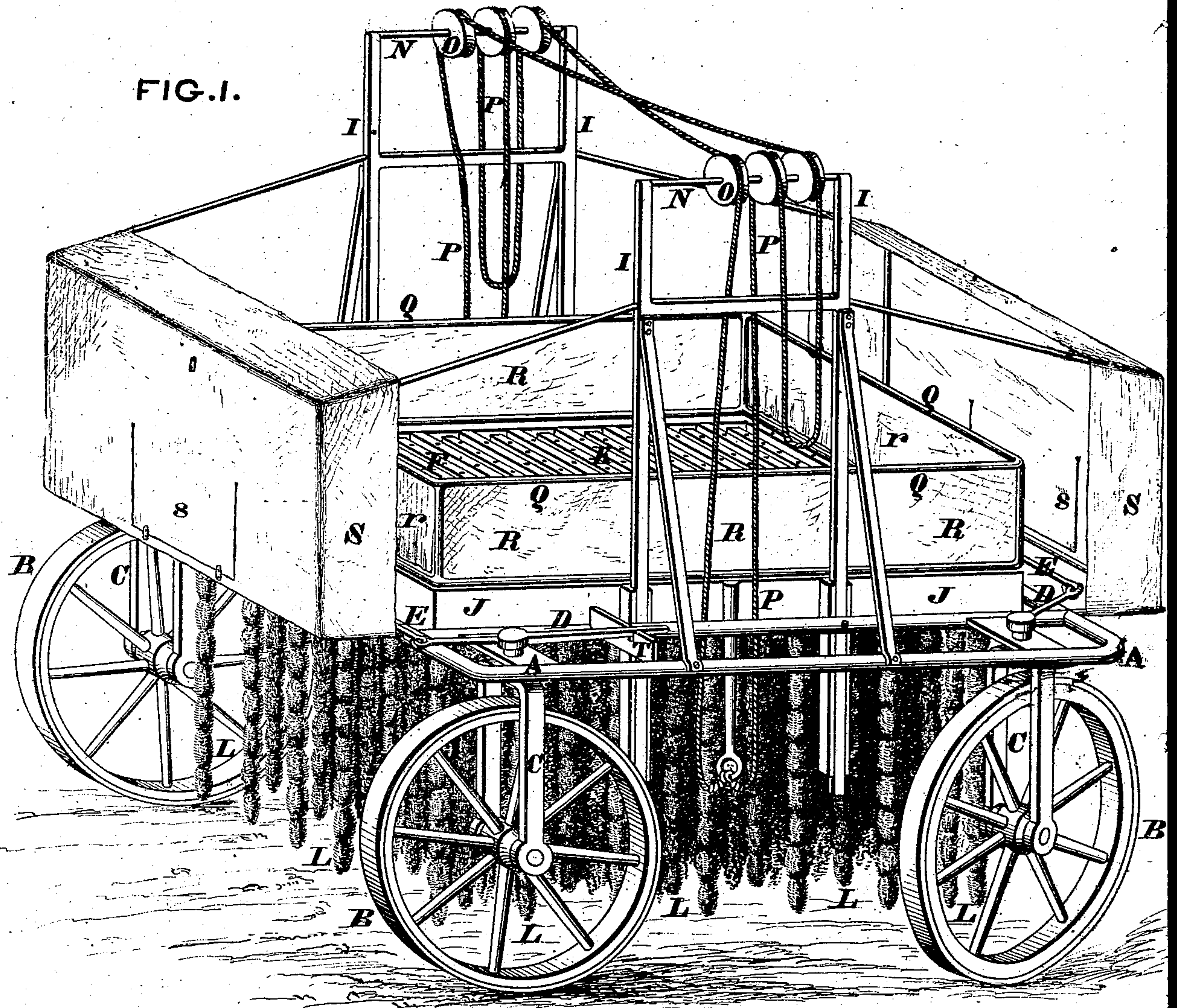
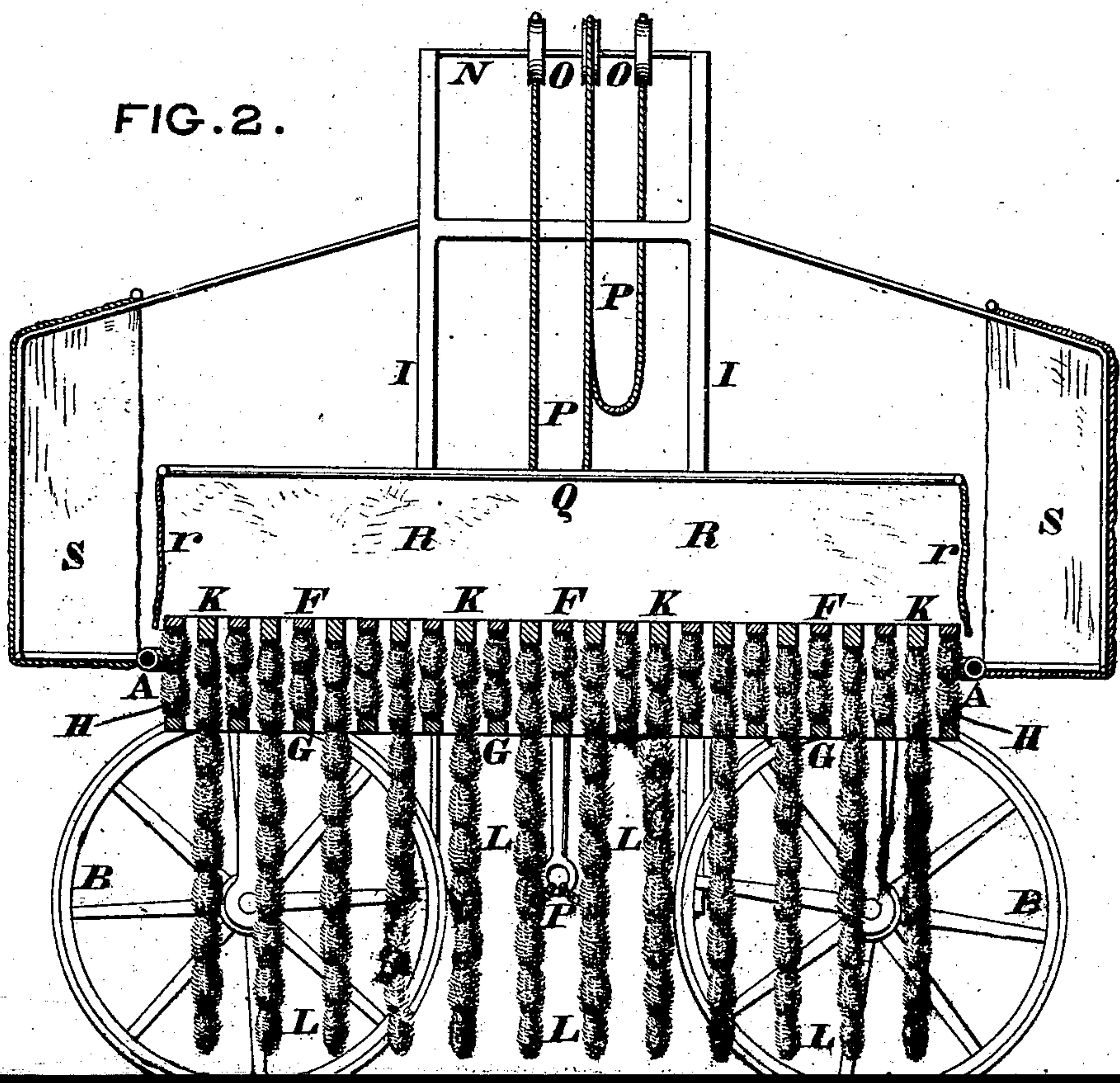


FIG. 2.



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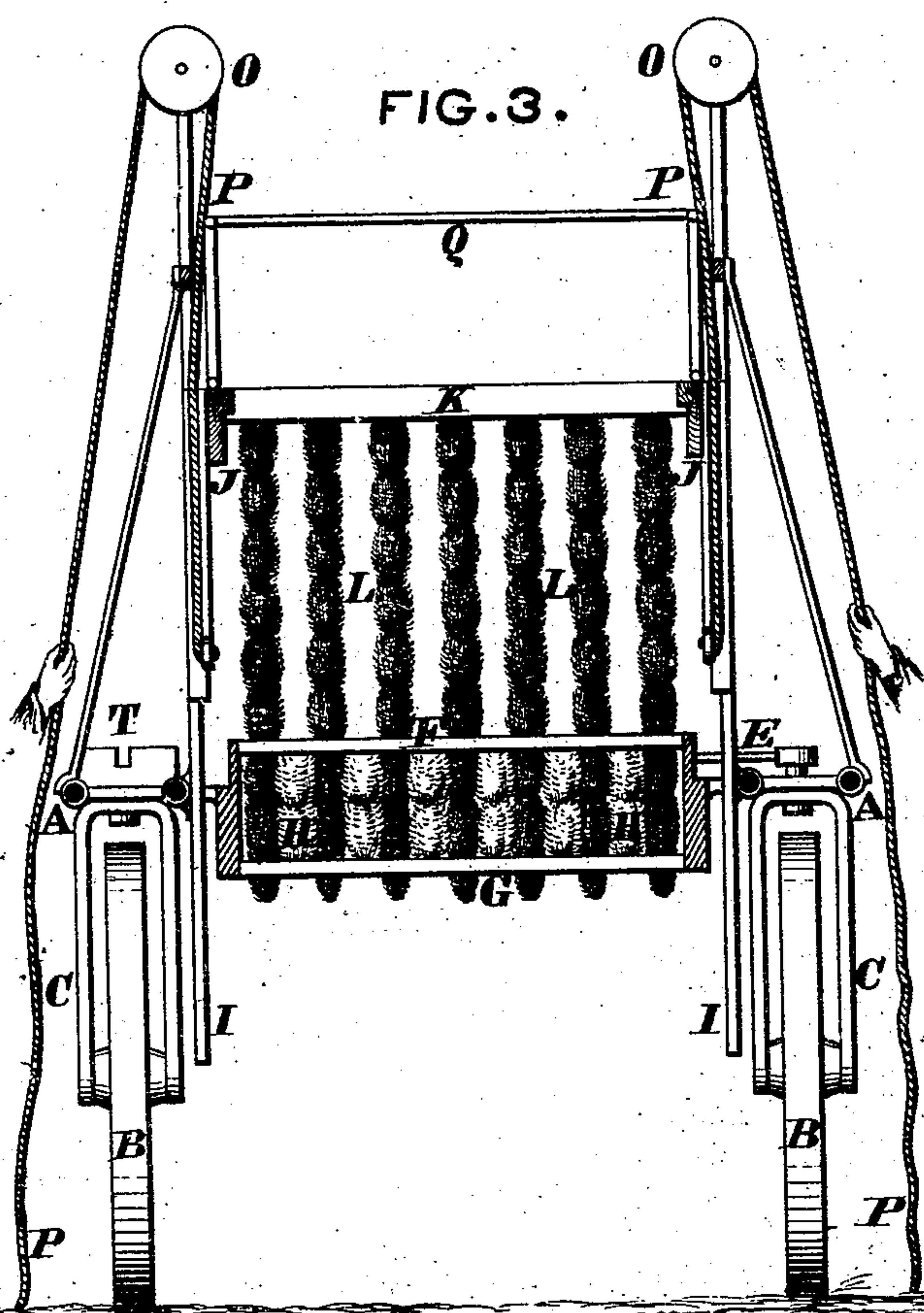


FIG. 3.

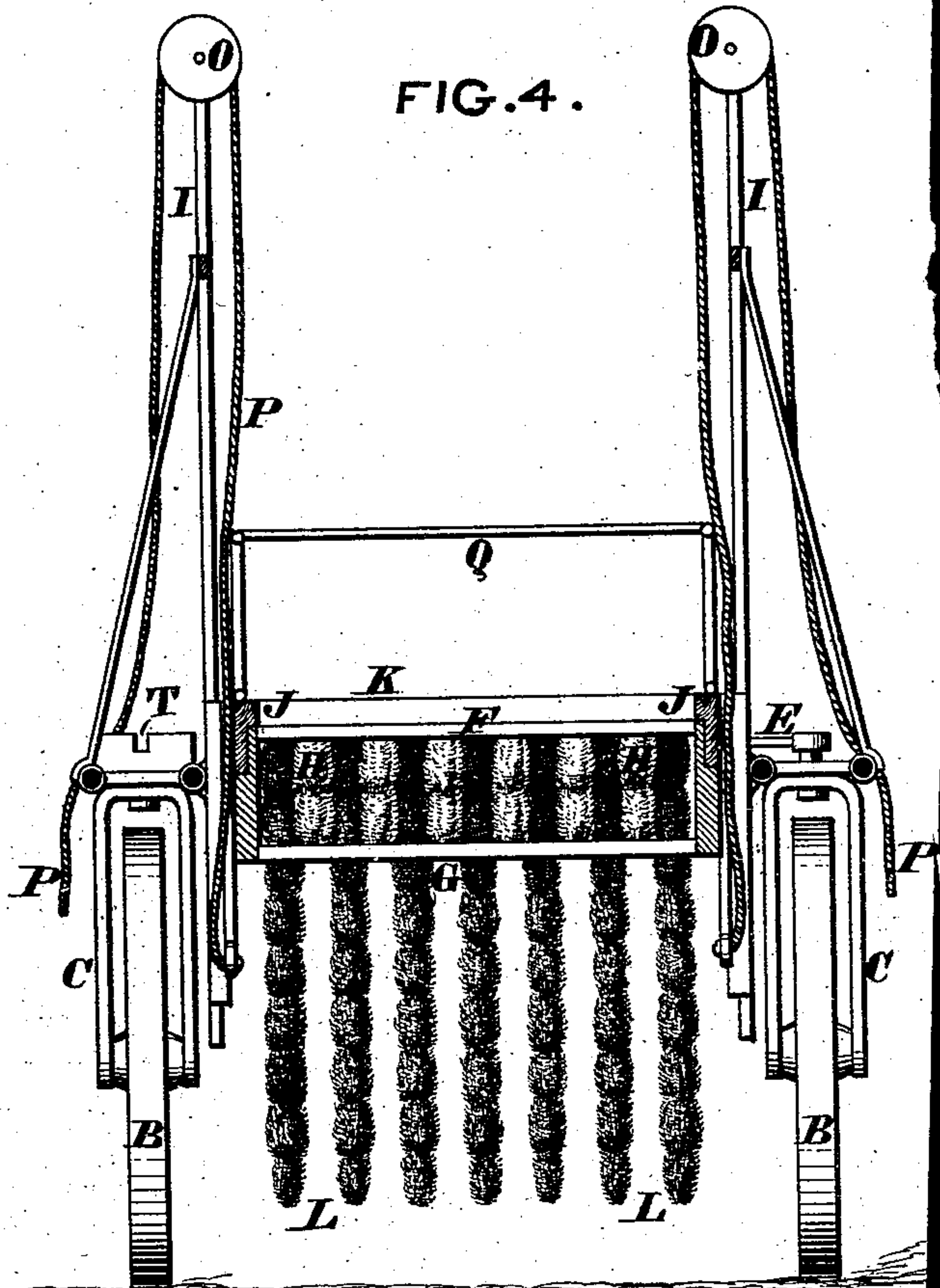


FIG. 4.

FIG. 5.

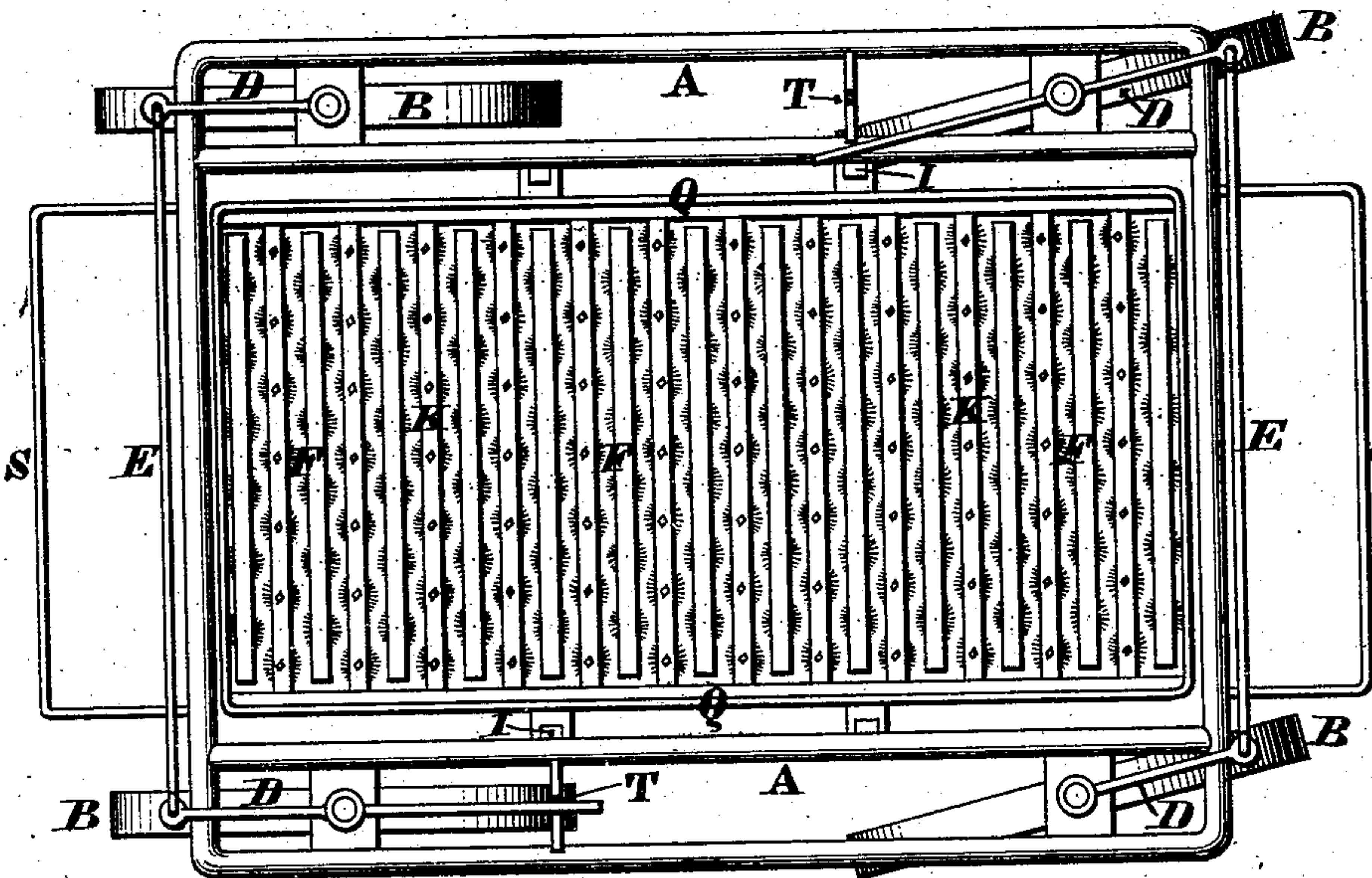


FIG. 7.

FIG. 8.

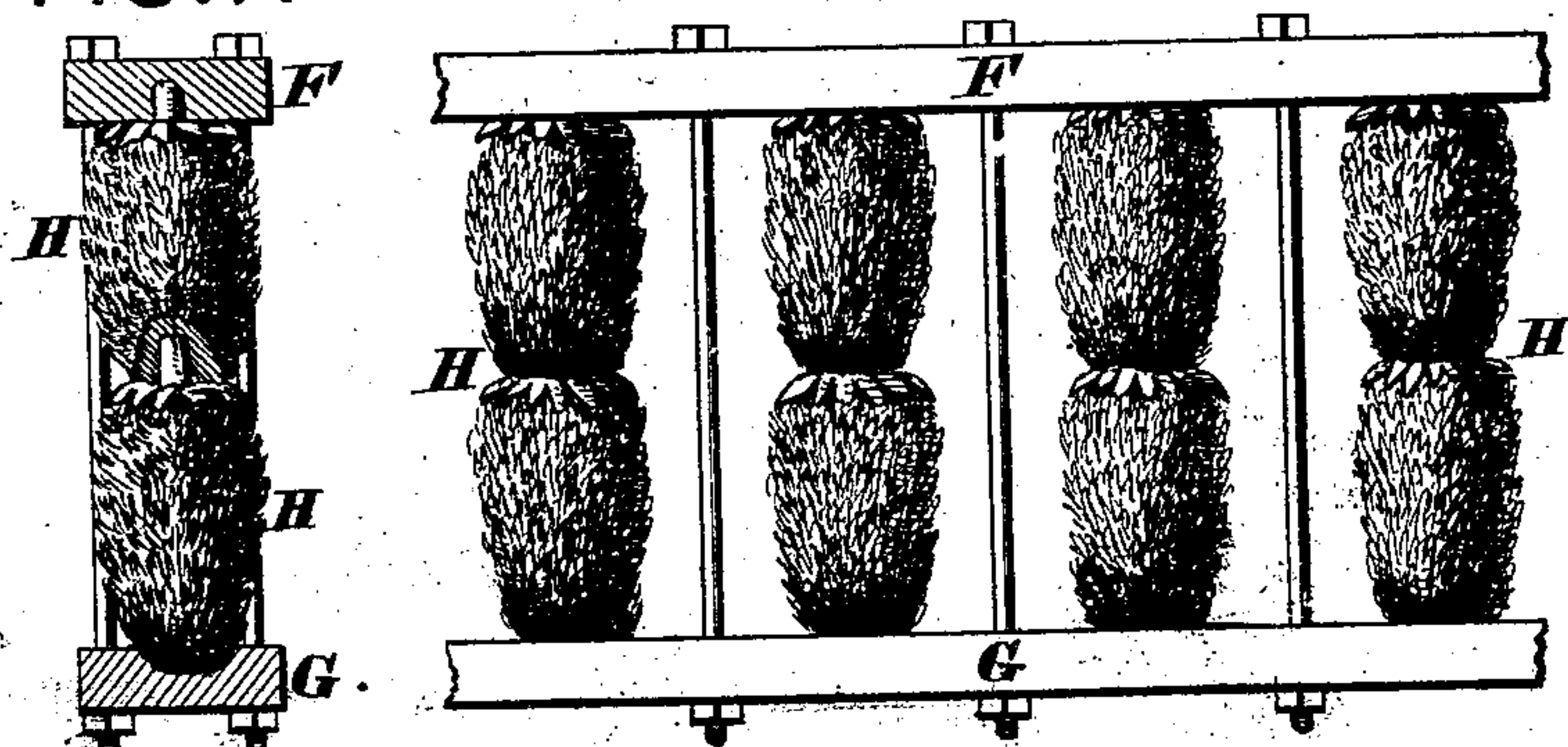
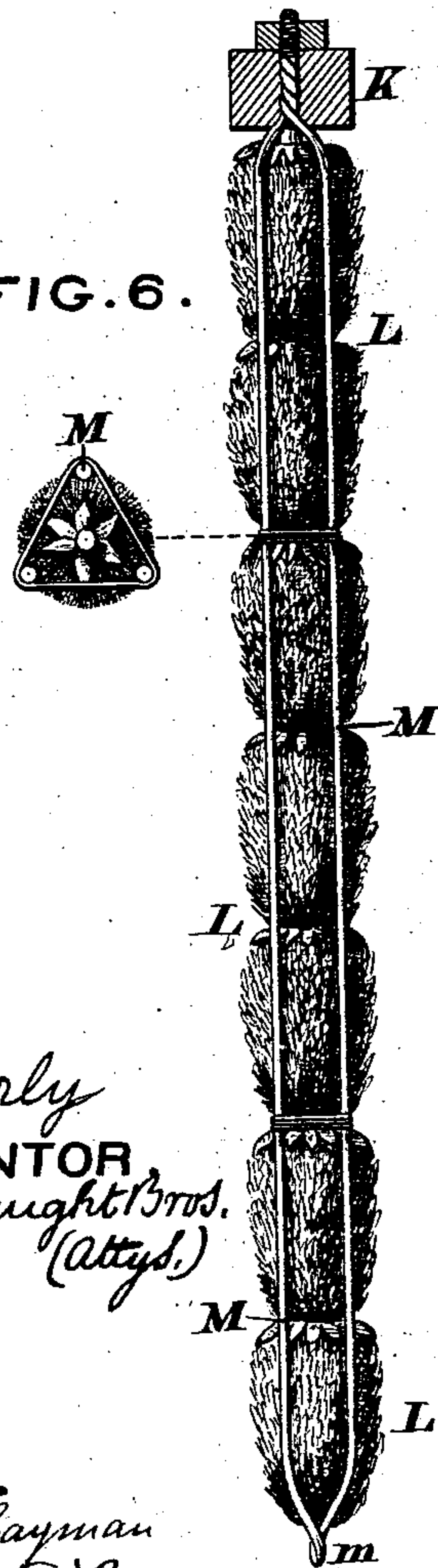


FIG. 6.



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WILLIAM APPERLY, OF LOUISVILLE, KENTUCKY.

Letters Patent No. 106,022, dated August 2, 1870.

IMPROVEMENT IN COTTON-PICKERS.

The Schedule referred to in these Letters Patent and making part of the same

I, WILLIAM APPERLY, of Louisville, Jefferson county, Kentucky, have invented a new and useful Cotton-Picker, of which the following is a specification.

Nature and Objects of the Invention.

My invention is designed to facilitate the picking or gathering of cotton in the field, and consists in a device whereby one or more persons passing along a row of cotton-plants are enabled to gather the lint or cotton that is ripe enough for removal.

General Description with reference to the Drawing.

Figure 1 is a perspective view of a cotton-picking machine embodying my invention, the pickers being in their depressed condition.

Figure 2 is a longitudinal section of the same machine.

Figure 3 is a transverse section, with pickers elevated.

Figure 4 is a transverse section, with the pickers depressed.

Figure 5 is a plan of the machine.

Figures 6, 7, and 8 are enlarged views of the teasels.

A is a frame, preferably of gas-pipe, supported on four wheels, B, which being journaled in swivels C, having arms D, are capable of being turned to the right or to the left, so as to guide the frame to its proper position, and also support it at the proper elevation above the crop.

Rods E, connecting the arms of the two front wheels, and of the two rear wheels respectively, cause the two wheels of either pair to veer to right or left together, thus enabling the machine to be guided from either side at will.

Extending athwart the frame A, at equal distances, are rails F G, which inclose teasels H, having their awns or prickles presented upward.

Secured to the raves or longitudinal portions of the frame A are standards I, which serve to guide and confine to a vertical path my picker-frame, consisting of a rectangular frame, J, crossed by transverse pieces, K, arranged intermediately to the rails F G, and at a corresponding distance apart.

Attached to and depending from the cross-pieces K are congeries of teasels, L, confined in wire cages or clamps, M, which terminate in points m, the more easily to penetrate between the branches of the cotton-plants.

The teasels L, like the teasels H, have their awns presented upward.

The standards I are joined by a transom, N, which carries a number of sheaves, O, for cords P, by which the picker-frame is, at the proper moment, elevated or depressed.

Rising from the picker-frame is a curb or box,

formed of iron rods or pipes Q, upon which there is stretched muslin, R, which serves to confine the gathered lint or cotton.

Projecting from both extremities of the frame A are pockets, S, which, like the box Q R, may consist of muslin stretched upon a frame of rods or pipes. Flaps T, in the said box and pockets, enable the removal of the gathered cotton, when desired.

It is intended that the wire caging M, while securely confining the teasels, shall be sufficiently flexible and elastic to yield to the more woody portions of the plant, and thus to insinuate itself readily between the branches thereof, this action being still further assisted by the pointed extremity of the said cage.

Notches, T, in the frame, enable the arms to be retained in the position for a directly forward or backward movement of the machine over the ground, when desired. The machine may be made adjustable, so as to permit of its picking cotton that has been planted in rows of different widths.

Longitudinal strips may be attached to the under sides of rails F G, for the purpose of steadying said rails, and also to assist in stripping the cotton.

These longitudinal strips would also serve as guides for the pickers L during their upward and downward movement.

A suitable guard or fender of canvas may be fastened to the frame A, for the purpose of separating the branches, where interlocked, from one row to another, and preventing the branches passing under the wheels. The fender would also serve to bring the branches more directly under the stripping-pickers.

Operation.

The picker-frame being elevated, and the machine being wheeled over one end of a row of cotton-plants, the said frame is suffered to descend among the branches of the plants, and is then, by means of the cords P, elevated. The teasels L of the picker-frame, in descending, simply slide past the lint, because their awns are presented upward, but on being elevated these same awns catch the lint and drag it up above the stationary teasels H. On the frame again descending, the awns of the teasels H catch the lint off from the teasels L, which thus return naked for the next gather, and, on reascending, push the previous picking off of the teasels H into the bed of the picker-frame, and, on again descending, leave the lint just gathered upon the awns of the stationary teasels, as before. All the ripe lint within the limits of the machine having been thus secured, the machine is advanced as much as its length along the row, and the operation of picking proceeded with as before.

When the bed of the picker-frame has been thus filled with lint, the latter is raked out through the flaps

r s, into the pockets, and thence into sacks or other suitable receptacles, and the work resumed.

While describing the preferred form of my invention, I do not propose to restrict myself rigidly thereto. For example, although preferring the natural teasel, I may substitute metallic cards or teasels therefor. And the frame A may be carried or lifted from place to place, instead of being moved on wheels.

Claims.

I claim as new, and of my invention—

1. The arrangement of frame or carriage A, stationary while in use, and adapted to straddle the row of plants, said frame being provided with a congeries of fixed teasels, H, to operate in conjunction with other congeries of ascending and descending teasels, I, for the purpose set forth.

2. The picker-frame J K, provided with the pendent congeries of teasels L, and with a box, Q R, and with elevating cords or pulleys, P, or their equivalent.

3. The mode of securing the picker-teasels by elastic and pointed cage M, as represented.

4. The receptacles or pockets S, of canvas or other suitable material, for the purpose designated.

5. The arrangement of the cotton-picker frame A, wheels B, swivels C, and arms D.

In testimony of which invention I hereunto set my hand.

WM. APPERLY.

Witnesses:

GEO. H. KNIGHT,
JAMES H. LAYMAN.