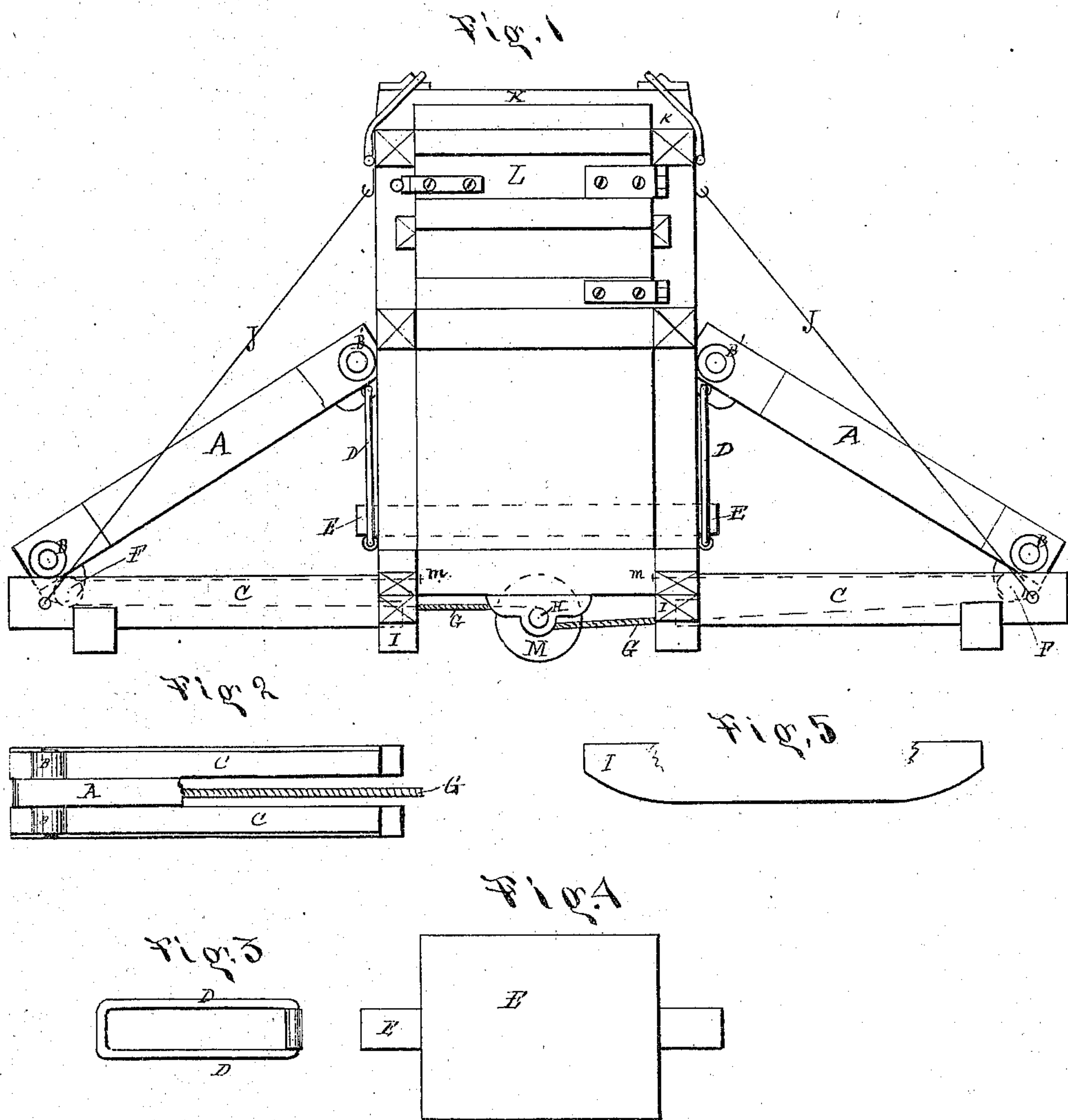


G. W. Nutter,

Hay Press.

No. 106,075.

Patented Aug. 2, 1870.



Witnesses:

David P. Smith
Morgan Winger

Inventor:

Geo W Nutter
By his Atty, G. M. Smith
Assigned to himself + Chas. R. Stone

United States Patent Office.

GEORGE W. NUTTER, OF SANTA CRUZ, CALIFORNIA, ASSIGNOR TO HIMSELF
AND CHARLES KEETON.

Letters Patent No. 106,075, dated August 2, 1870.

IMPROVEMENT IN BALING-PRESSES.

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

To all whom it may concern:

Be it known that I, GEORGE W. NUTTER, of the city and county of Santa Cruz, State of California, have invented certain new and useful Improvements in Baling-Presses for baling hay, cotton, and other fibers and products; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters marked thereon.

My invention relates to certain improvements in that class of baling-presses in which the follower is operated by means of ropes, pulleys, and rods or levers, and consists in the employment of two stout traveling-rods, provided with friction-rollers or wheels, working in guides; their upper ends moving in a vertical direction, while their lower ends move horizontally.

The upper ends of the rods are connected to the follower by links, and the lower ends are provided with rope sheaves, or movable pulleys, receiving motion in one direction from a rope and revolving shaft, and, in the other direction, from the weight of the follower, said rods and appurtenances being arranged in such a manner that a uniform motion imparted to the revolving shaft will cause the follower to move with a constantly diminishing velocity, and constantly increasing power, from the beginning to the end of the stroke, by which the bale is compressed.

My invention further consists in constructing and arranging the hereinbefore-mentioned details in such a manner that they can be readily detached from the body of the press, and also in forming the sills upon which the press rests in such a manner that the said sills may serve as runners upon which the baling-press may be moved from place to place, as required.

In the drawing—

Figure 1 is an elevation of a hay-baling press, having my improvements.

Figure 2 is a plan of a part of the same, showing the lower end of one of the traveling rods, and the guides for said lower end.

Figure 3 is an elevation of one of the links, by which the upper end of the traveling rods are secured to the follower.

Figure 4 is a plan of the follower.

Figure 5 is a side view of one of the sills, fashioned something like a sled-runner, for the purpose hereinbefore set forth.

Like letters refer to like parts in each of the figures.

A represents the traveling rods; and
B, the friction-rollers.

C are the guides for the lower end of rods A. The guides for the upper end are not seen in the drawing.

D are the links.

E is the follower; and

F are the rope-sheaves, shown in dotted lines, being hidden from sight by the guides C.

G is the rope; and

H the revolving-shaft.

I are the sills or runners; and

J are iron rods or braces, that can be readily removed with the sills.

The body of the press consists of a rectangular box or frame-work, provided with a door K, at the top, for receiving the hay, and doors, L, at the sides, for removing the bale.

The rope G passes around the sheaves F, and has one end secured to the frame-work at *m*, and the other end to the shaft H, in such a manner that the revolution of the shaft will cause the lower ends of the traveling rods to approach the body of the machine.

M is a drum, about which a rope may be wound, for the purpose of applying horse-power.

The operation of pressing a bale of hay with this machine is as follows:

The rectangular box forming the body of the press having been filled with hay through the top, the cover or door K is fastened down, as shown in the drawing, and, motion being communicated to the shaft H, the rope G will be wound upon the shaft, and bring the lower end of the rods A with a uniform motion toward the body of the machine, but the upper ends of said rods will, at the same time, move up the vertical sides of the box with a constantly diminishing velocity, and increasing power, until the rods A have attained a vertical position, and the follower E has arrived at the top of the stroke, compressing the hay into a bale of the required size, to be bound and removed by the door L; then, by releasing the shaft H, the weight of the follower will cause the parts to return to their original position, when the operation can be repeated.

It will be readily understood that an extremely cheap, light, and portable baling-press is thus produced, that will compress the bale into a much smaller space than by the use of the ordinary press.

It will also be seen that my press can be readily taken to pieces, and drawn from place to place on the runners I, prepared for that purpose.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. The traveling rods A, provided with the fric-

tion-wheels B B', and pulleys F', constructed and arranged as shown and described, for the purposes set forth.

2. The rods A, links D, rope G, and shaft H, when combined with the follower E, substantially as set forth.

3. The rods A, having friction-wheels B B, and pulley F', and having horizontal and vertical guides,

when combined with the links D, and follower E, substantially as set forth.

In testimony whereof I have hereunto set my hand and seal.

G. W. NUTTER. [L. S.]

Witnesses:

C. W. M. SMITH,
DAVID R. SMITH.