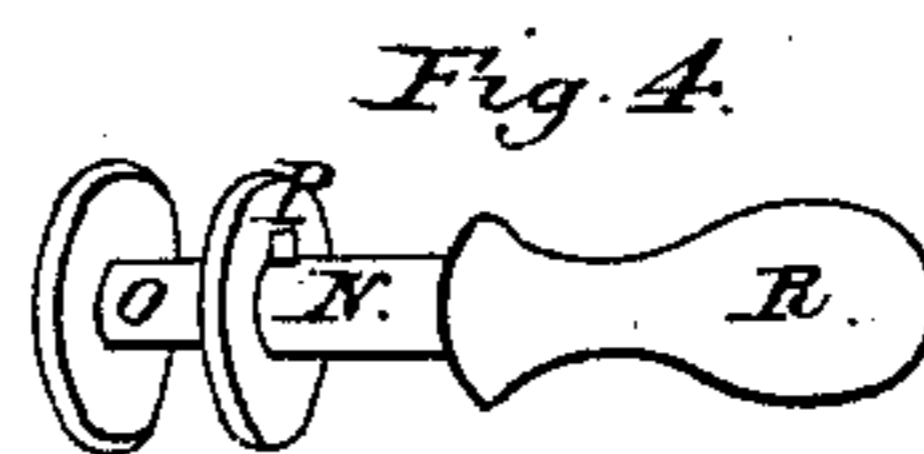
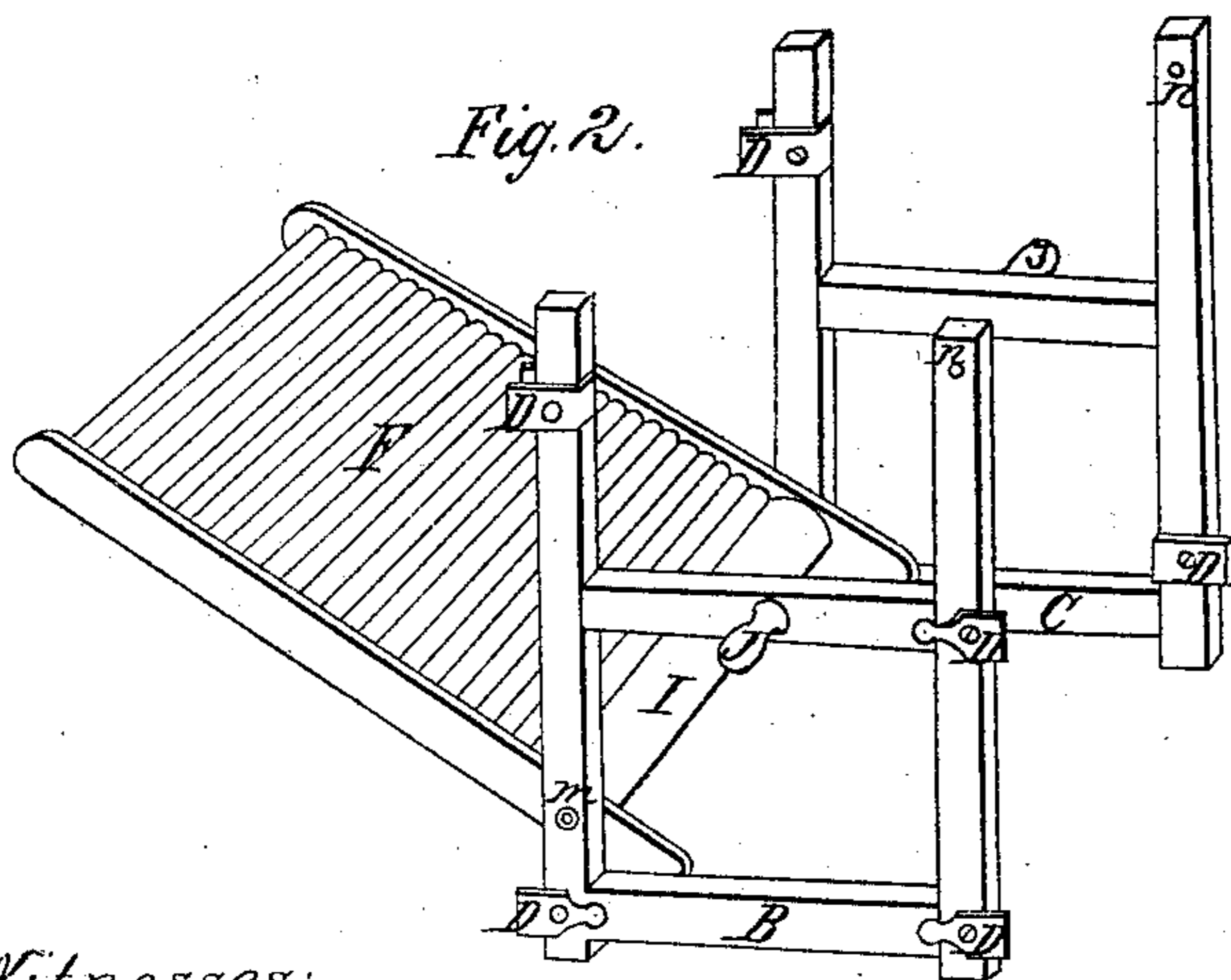
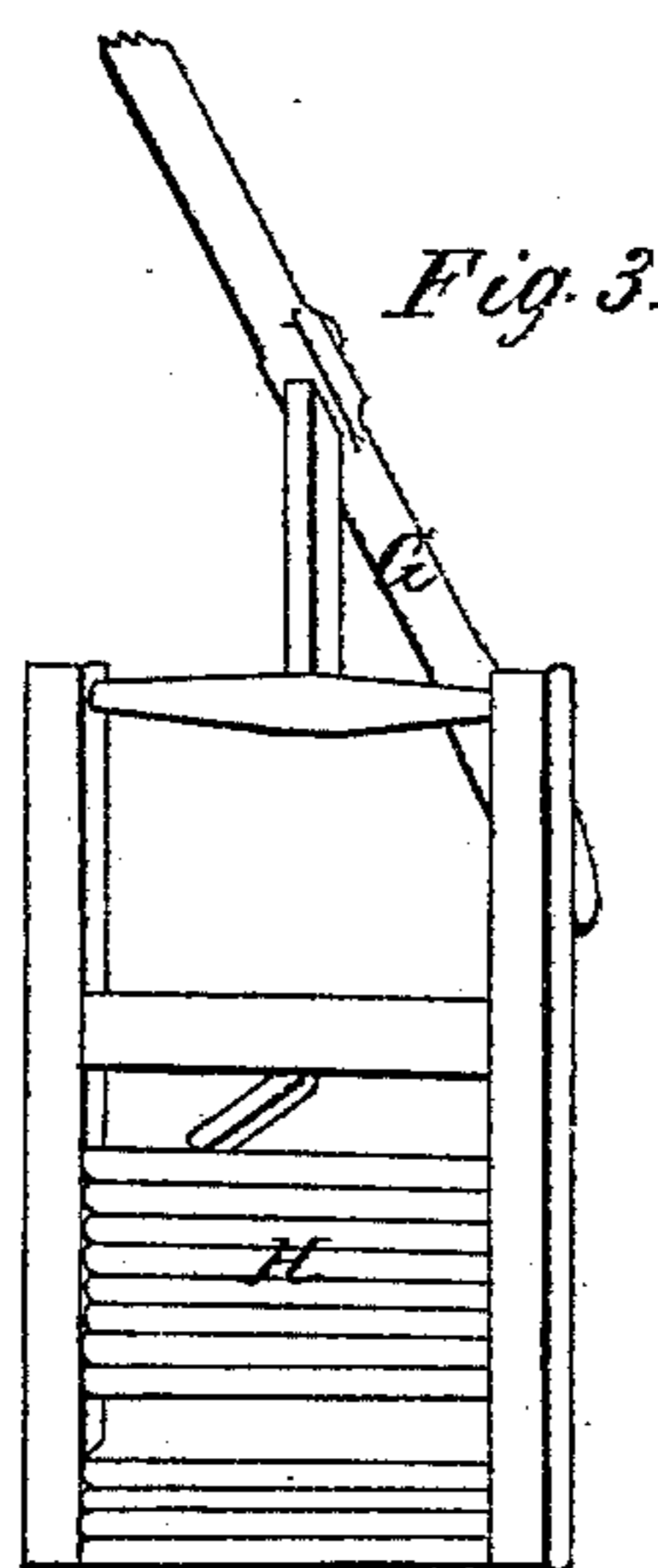
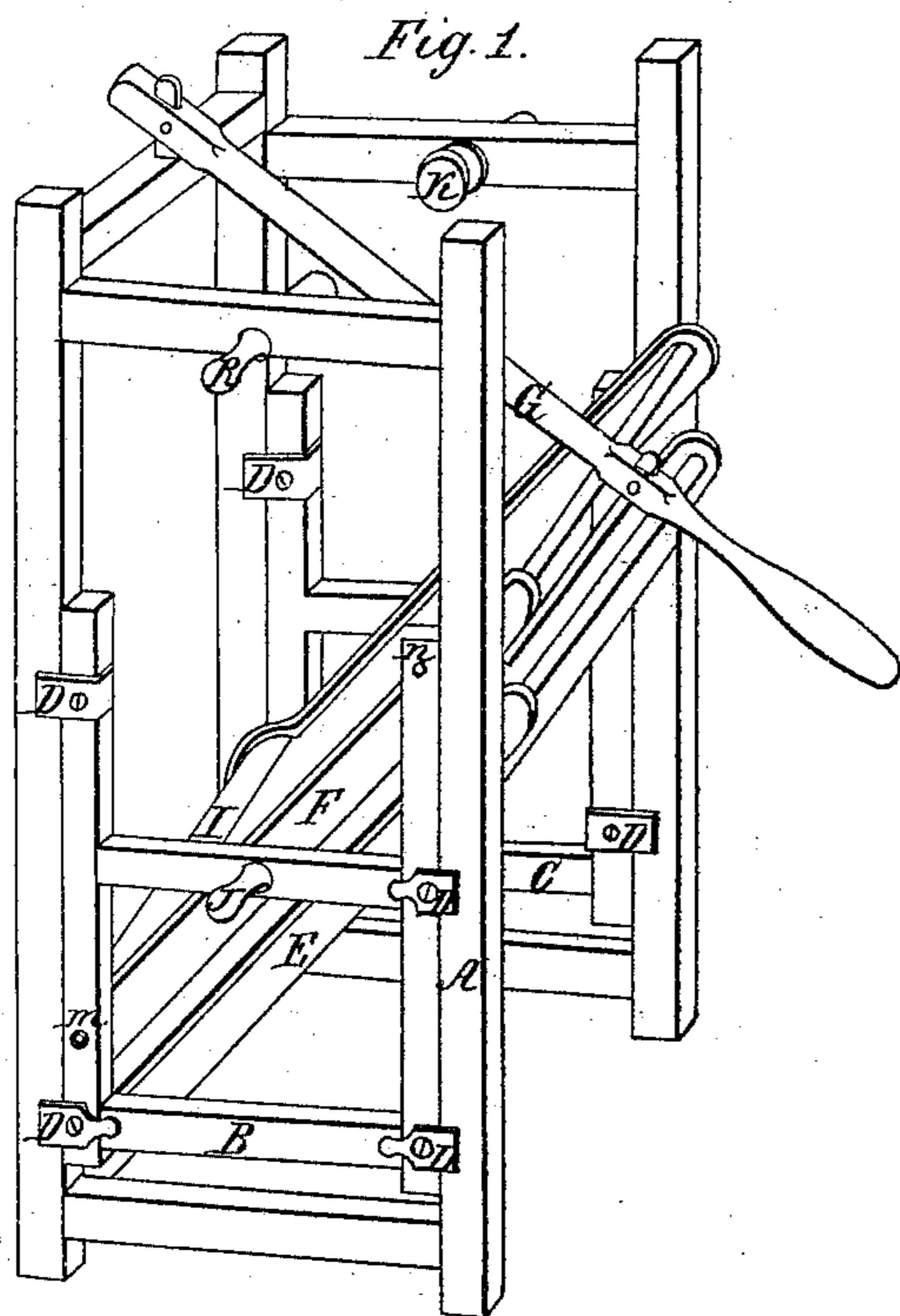


J. K. Dugdale,
Washing Machine,
N^o 50,922. Patented Nov. 14, 1865.



Witnesses;
John Finley
Saml. F. Dugdale

Inventor;
James K. Dugdale

UNITED STATES PATENT OFFICE.

JAMES K. DUGDALE, OF RICHMOND, INDIANA.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 50,922, dated November 14, 1865.

To all whom it may concern:

Be it known that I, JAMES K. DUGDALE, of the city of Richmond, in the county of Wayne and State of Indiana, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the machine complete, Figs. 2, 3, and 4 being parts, hereinafter referred to.

The nature of my invention consists in the employment of frames, in combination with wash-boards, arranged in such a way as to afford sufficient friction for washing, and designed to be used with the common wash-tub or other suitable vessels.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Letter A, Fig. 1, is a square frame, wide enough to admit any desired sized wash-board, and about twice as high as wide.

B and C are movable frames sliding between the upright posts of frame A and held in their place by guides D on the outside and inside of said movable frames. Said guides may be made of wood or metal.

E is a wash-board firmly fastened to the frame A at an angle of about forty-five degrees, more or less, as most convenient. The front end, about half-way up the frame F, is also a wash-board, covering the wash-board E, which board F is attached to the sliding frames B and C, and has a roller across the lower end, marked I, under which the clothes are thrust into the water in the tub.

G is a lever or handle, to which is attached a frame wash-board, H, in which the clothes are fastened, and it (the wash-board H) worked up and down by said handle between the wash-boards E and F, shown also by Fig. 3.

J J are handles attached to the movable frames B and C, for the purpose of easing off or adding pressure, as may be desired.

K K are devices for tightening the cord by which the machine is anchored to the tub. (Shown on a larger scale by Fig. 4.)

The wash-boards E and F may be fluted boards, or composed of a series of rollers, or both.

The mode of attaching the wash-board F and its connection with frames B and C is shown in Fig. 2, in which B and C are the movable frames; F, the wash-board; I, the roller working in the lower end of said board. A rod at *m* may pass through the roller or board near the roller, or said board may be hung on pins which answer the purpose of a hinge, allowing the board to be thrown back and rest upon the side of the tub, (in which position it is shown,) enabling the operators to put in or take out clothes, and may be used in that position as a hand-board. The said wash-board F may be held to its position when shut by a rod or pins at *n*.

Fig. 3 shows the middle wash-board, in which the clothes are fastened; H, the wash-board; G, the handle by which it is worked.

Fig. 4 shows the device (marked K in Fig. 1) for tightening the cord, and is composed of a handle on the outside of the frame, a journal by which it is held in its position, and a reel or spool inside of the frame for winding the cord on. In the journal is inserted one or more cogs to catch in notches made in the box of the journal or in a plate for that purpose. By taking hold of the handle and pushing it in toward the frame will throw the cog out of the notch, when it may be turned and the cord tightened and held to its place by the cog slipping into the notch.

R is the handle; N, the journal; O, the spool; P, the cog.

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

1. The arrangement and combination of the frames A, B, and C with the guides D and wash-boards E and F, as and for the purposes set forth.

2. The device K, in combination with frames A, B, and C and wash-boards E and F, as and for the purpose specified.

JAMES K. DUGDALE.

Witnesses:

JOHN FINLEY,

SAML. G. DUGDALE.