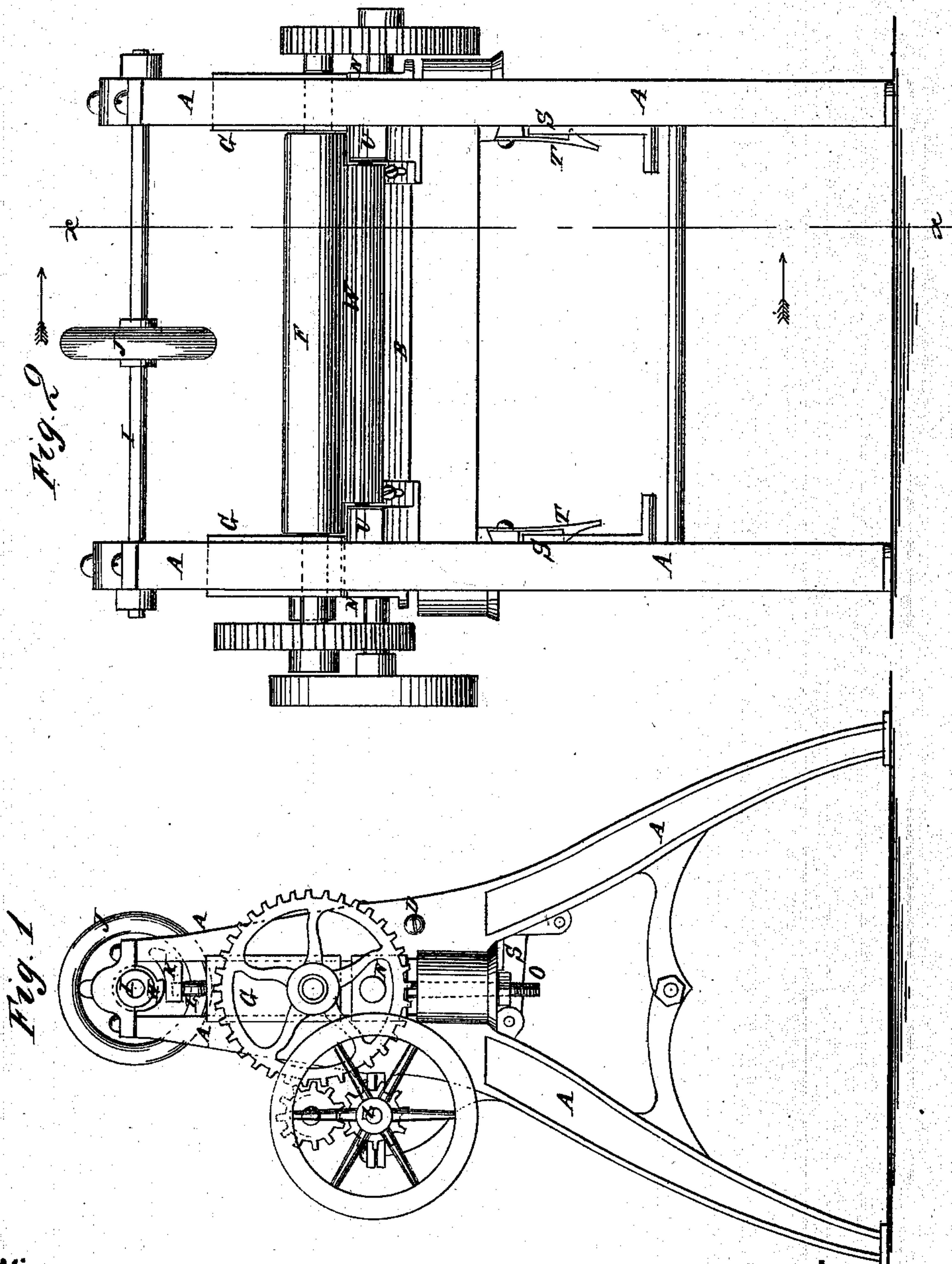


A. F. STOWE.
Leather-Splitting Machines.

No. 139,744.

Patented June 10, 1873.



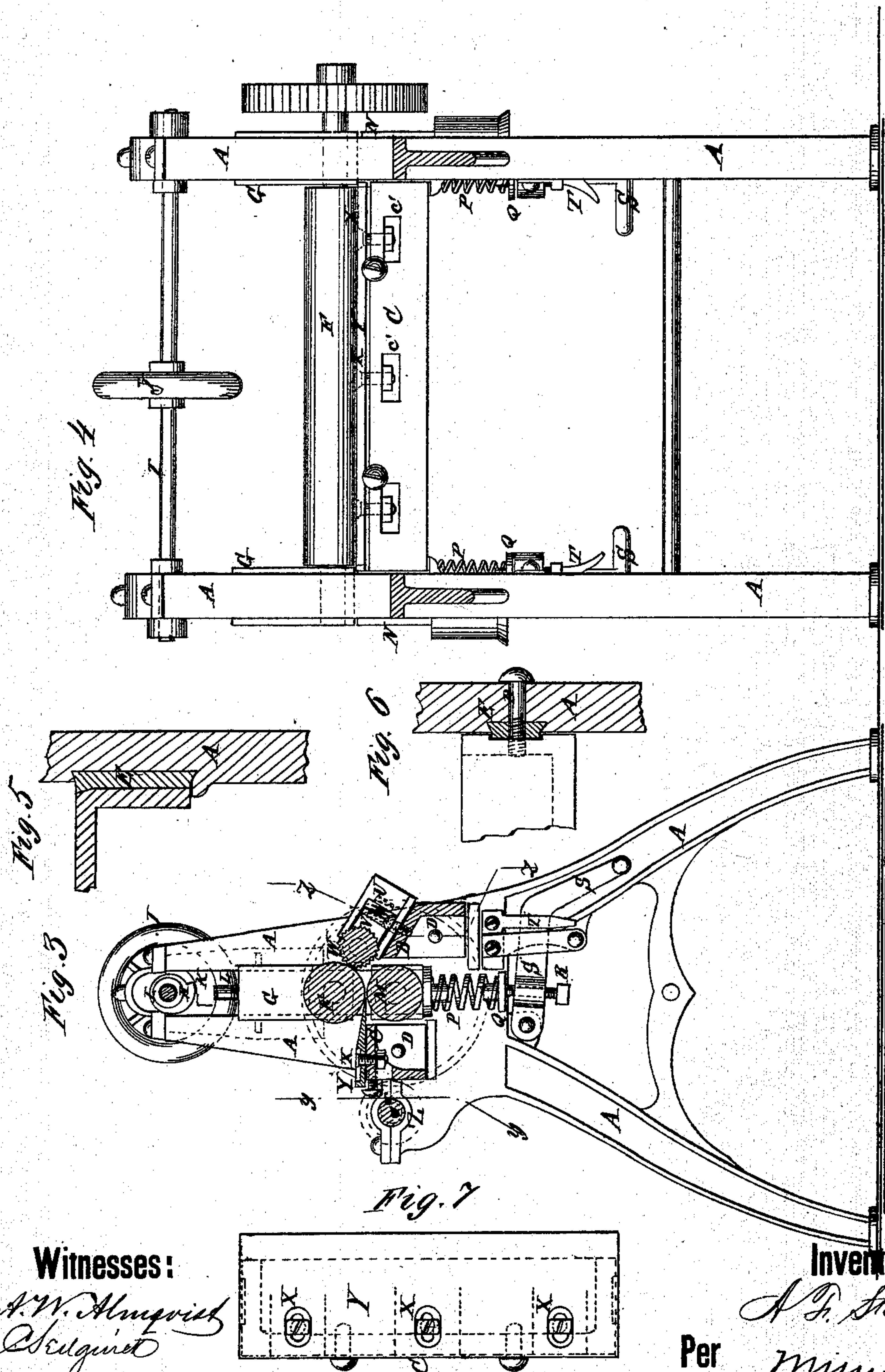
Witnesses:
Chas. W. Almqvist

Inventor:
A. F. Stowe
Per *Wm. L. Stowe*
Attorneys.

A. F. STOWE.
Leather-Splitting Machines.

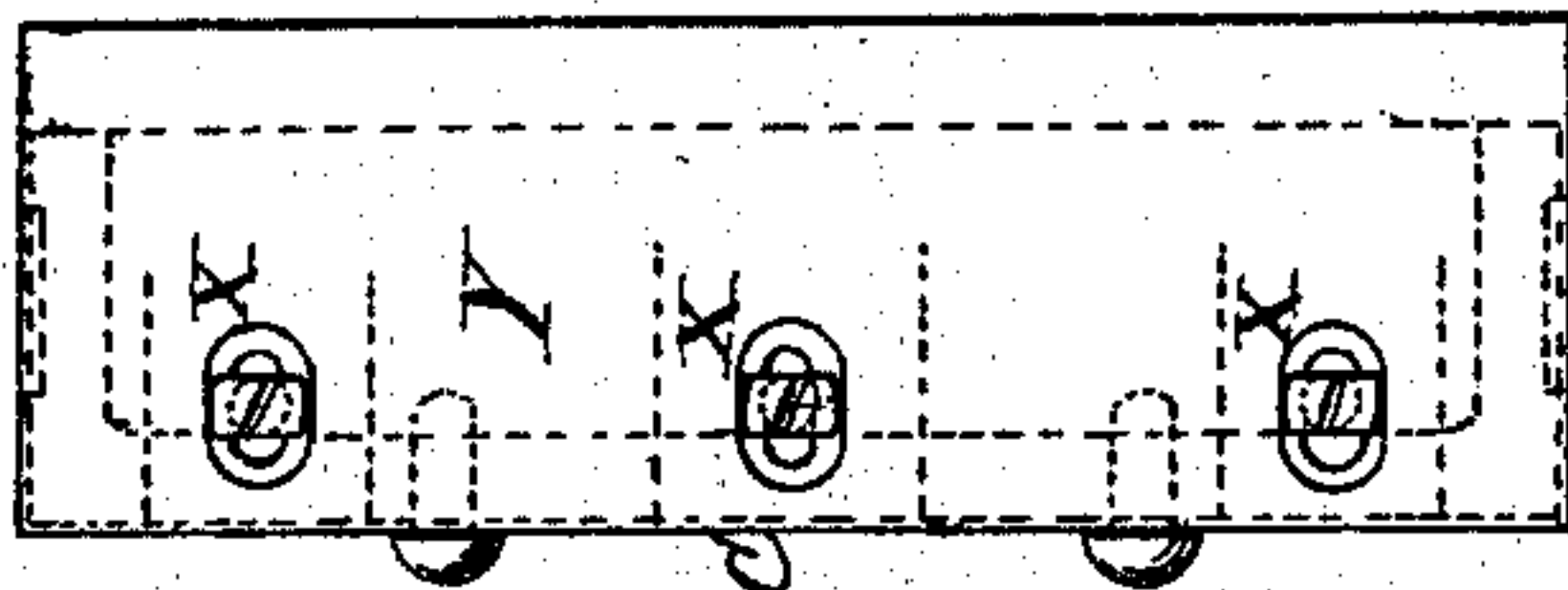
No. 139,744.

Patented June 10, 1873.



Witnesses:

A. W. Mumford
Edgworth



Inventor:

A. F. Stowe

Per

Attorneys.

UNITED STATES PATENT OFFICE.

AARON F. STOWE, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN LEATHER-SPLITTING MACHINES.

Specification forming part of Letters Patent No. **139,744**, dated June 10, 1873; application filed April 12, 1873.

To all whom it may concern:

Be it known that I, AARON F. STOWE, of Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Leather-Splitting Machines, of which the following is a specification:

Figure 1, Sheet 1, is an end view of my improved machine. Fig. 2, Sheet 1, is a front view of the same. Fig. 3, Sheet 2, is a detail vertical cross-section of the same taken through the line *x x*, Fig. 2. Fig. 4, Sheet 2, is a rear view of the same, partly in section, through the line *y y*, Fig. 3. Fig. 5, Sheet 2, is a detail section of the same taken through the line *z z*, Fig. 3. Fig. 6, Sheet 2, is a top view of one end of the apron, the frame and key being shown in section. Fig. 7, Sheet 2, is a detail top view of the knife and knife-bed.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved leather-splitting machine, which shall be more reliable in operation, more conveniently manipulated, and less expensive in manufacture than the machines constructed in the ordinary manner. The invention consists in the improvement of leather-splitting machines, as hereinafter described and pointed out in the claim.

A are the end frames of the machine. B is the apron, and C is the knife-bed. In the ends of the apron B and bed C, which abut against the end frames A, rest upon a ledge or shoulder formed upon said end frames, and are secured in place by screw-bolts D, are formed plane grooves, and in the frames A, directly opposite said ends, are formed dovetailed grooves, the grooves in the said ends and frames being directly opposite each other. F is the upper roll, the journals of which revolve in bearings G, that slide in ways in the upper part of the end frames A, and are held down to their places by cams H, operated by a rod, I, and hand-wheel J, said cams operating the swiveled heads K of set-screws L attached to said bearings G, so that the action of the said cams may be regulated as desired. M is the lower feed-roll, the journals of which work in bearings N, that slide in ways in the

end frames A, and the upward movements of which are limited by nuts placed upon the screws O, attached to said bearings and passing through holes in the said frames A. The bearings N rest upon the upper ends of the coiled springs P, the lower ends of which rest upon plates or washers Q, swiveled to the upper ends of the set-screws R, which pass up through screw-holes in the levers S, so that the tension of the springs P may be adjusted by turning the said screws R out or in. The inner or rear ends of the levers S are pivoted to the frames A. The levers S extends across the inner sides of the frames A through keepers attached to said frames, are bent and extend downward along the inner sides of the front legs of the end frames, and terminate in handles, so that by lowering the lower ends of the levers S the tension will be taken off the springs P, and by raising the said ends of the said levers the said springs will be again put under tension. The levers S are held in place when raised by spring-catches T, or other fastening, attached to the frames. This construction enables the tension to be conveniently taken off the springs P at night, or at other times when the machine is not required to be used. It also enables the springs to be tested singly when desired. To the upper side of the apron B, at its ends, are adjustably attached slotted blocks U, in the slots of which are placed the bearings V for the journals of the feed-roll W, which bearings are held out by coiled springs placed beneath them in the slots of the said blocks U. The feed-roll W is thus held forward against the upper feed-roll F, so that the latter, to be operated upon, must pass around a portion of the surface of the upper roll F before it is grasped by the lower feed-roll M. The effect of this is that the leather is kept smooth and free from wrinkles or folds, however flabby it may be. In the rear or outer side of the knife-bed C are formed slots *c'*, into which pass the lower ends of the bolts X that secure the knife Y upon said bed C. The bolts X are provided with cross-heads and pass through transverse slots in the knife Y, so that by turning the said bolts X one-quarter around the knife can be readily detached. The nuts of the bolts X are placed in the slots *c'*, so that they can be turned to tighten or

loosen the bolts X through the outer parts of the said slots. Another advantage of this construction is that the lower ends of the bolts X do not project to be in the way of the leather as it passes out of the machine. The upper and lower feed-rolls F M are driven by gearing from the shaft Z, to which power is applied in the ordinary manner. The feed-roll W is driven by friction.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The movable lever S, as applied to support the springs of the lower roll of a leather-

splitting machine, to allow them to be relieved of tension when the machine is not at work.

2. The combination, with a knife having an oblong recess and shelf therein, of bolts X having oblong heads, and bed C vertically and horizontally slotted, to enable the knife to be readily taken out without removing the bolts, and the latter to be loosened from the front of bed instead of from the bottom thereof.

AARON F. STOWE.

Witnesses:

W. W. RICE,

SAMUEL UTLEY.