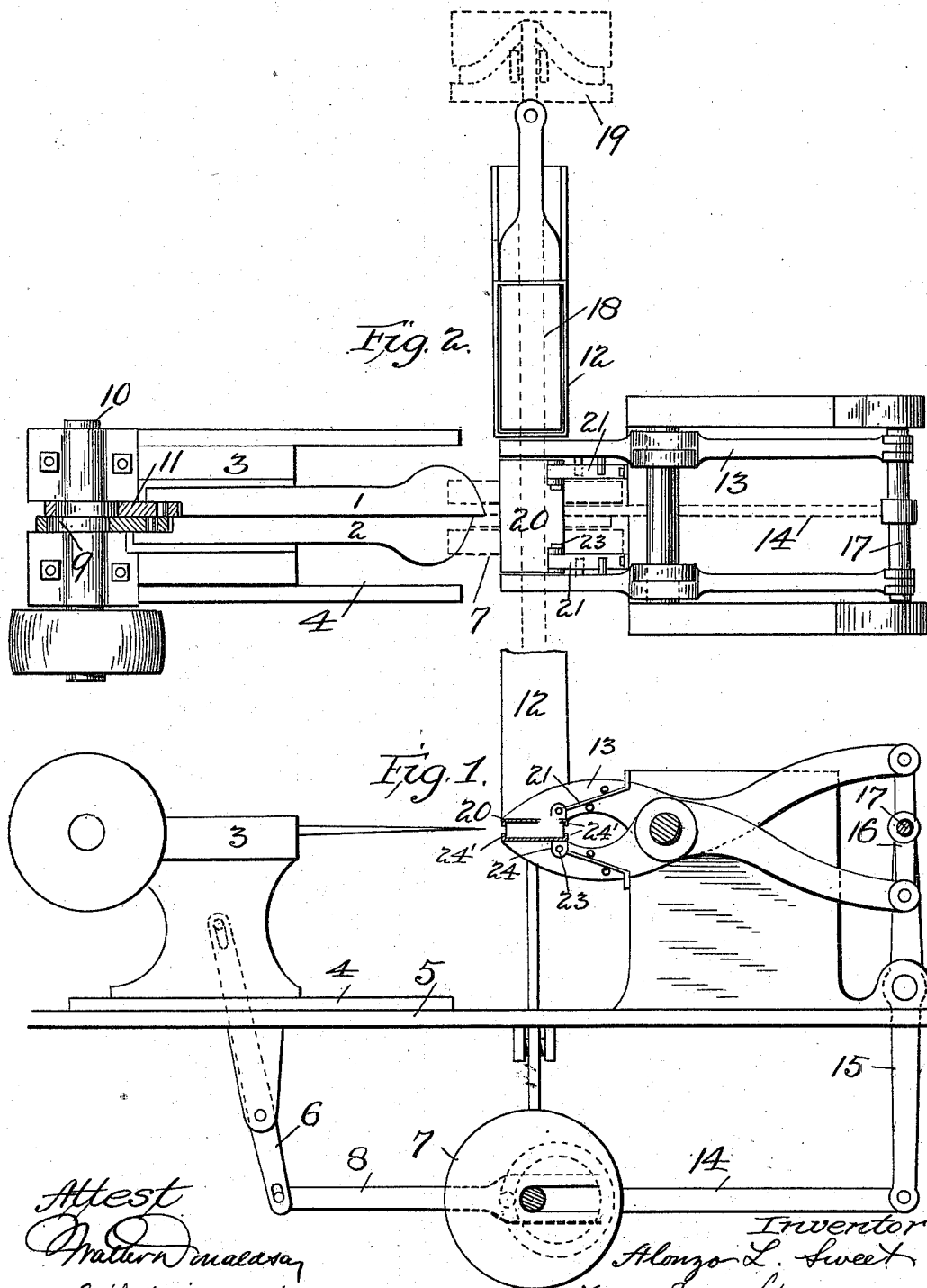


(No Model.)

A. L. SWEET.
LEATHER SLITTING MACHINE.

No. 571,295.

Patented Nov. 10, 1896.



Attest
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Att'y.

UNITED STATES PATENT OFFICE.

ALONZO L. SWEET, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE SEAMLESS LEATHER COMPANY, OF ILLINOIS.

LEATHER-SLITTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 571,295, dated November 10, 1896.

Application filed August 2, 1895. Serial No. 558,014. (No model.)

To all whom it may concern:

Be it known that I, ALONZO LOUIS SWEET, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Leather-Slitting Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

10 It is the object of my invention to provide a machine for slitting leather, and especially for holding and slitting small blanks which have been previously trimmed and cut to the required size for making loops for use on harness and the like.

15 My invention comprises means for holding the blank by its edges and a knife for slitting the blank as held by the clamping and holding means, one of said parts being movable in relation to the other.

20 My machine includes also holding means for the blank, a slitting-knife, and automatic feeding means for feeding the blanks to the holding means and cutting-knife.

25 In the drawings, Figure 1 is a side view of the machine, partly in section. Fig. 2 is a plan view of the same.

30 The knife used for slitting may be of various forms. I have shown, however, a knife made up of two sections 1 2, adapted to reciprocate in relation to each other and held in a carriage 3, movable on a way 4 of the bed 5 by a lever 6, pivoted to the bed and operated by a grooved cam 7 and a link 8.

35 The knife-sections are reciprocated by eccentrics 9 on the shaft 10, journaled in the carriage, the straps 11 of said eccentrics being connected to the knife-shanks.

40 The blanks piled in a hopper 12 are fed one by one therefrom to the clamping or holding levers 13, there being two pairs of these clamping-levers, one pair clamping one end of the blank, while the other pair clamps the other end. The members of each pair of levers are

45 operated from a grooved cam on the shaft through a link 14, lever 15, and toggle-arms 16, the lever 15 being connected to a cross-bar 17, in turn connected to the toggles.

50 The front ends of the clamping-levers are opened to receive the blank, which is fed laterally between the members by the plunger

18, operated from a grooved cam 19 on the cam-shaft, the opening of the magazine being close to and in line with the opening between the gripping-jaws of the clamping-levers. 55 Between the pairs of clamping-levers spring-plates 20 are arranged, one for the upper members of the clamping-levers and one for the lower members, these plates being held by springs 21, carried on the jaws of the clamping-levers by pins and secured to the plates by screws or pins 23, passing through ears 24 of the plates and into eyes on the springs, the connection at this point being a rigid one and at the rear portions of the plates. 60 These plates have lips 24' along their front and rear edges of slight depth, so that when the jaws are clamping the leather blank there will be a space between these lips sufficient to admit the slitting-knife. 65

70 The plates have yielding movement between the jaws, and they serve to form a receiving box or chamber for the blank when fed, as they extend across the space between the jaws, and when the blank is in place its ends project from the box or plates and are gripped by the clamping-jaws when these are closed, so that the knife will slit the central portion of the blank, leaving its edges as held by the clamp intact. After the slitting has 75 been done by the advance and retraction of the slitting-knife the jaws open, the spring-plates still hold the blank, and the feeding-plunger then feeds a fresh blank forward between the spring-plates, the slit blank being 80 pushed from the holding-plates by the fresh blank. 85

I do not wish to limit myself to a stationary holding means and a movable knife, as the arrangement may be reversed. 90

I claim—

1. In combination in a slitting-machine for leather, a slitting-knife, means for holding the leather by its edges and means intermediate of the holding means located on opposite sides of the leather to be slit and engaging said opposite sides to hold the intermediate part of the said leather blank, substantially as described. 95

2. In combination, the slitting-knife, the holding means for the edges of the leather and yielding means intermediate of the edge, 100

holding means to engage the leather, substantially as described.

3. In combination, the slitting-knife, means for clamping the leather at its edges, and the
5 spring-plates intermediate of the clamping means, substantially as described.

4. In combination, the slitting-knife, the clamping-levers pivotally supported, means for opening and closing the levers, said levers
10 being arranged to clamp the edges of the leather, substantially as described.

5. In combination, a slitting-knife clamping means with operating mechanism to open and close the same, a receiver or box intermediate of the clamping means and feeding
15 mechanism for feeding the blanks thereto, said box having yielding walls and open at the front, sides and rear edges for receiving the loop-blank and the slitting-knife substantially as described.
20

6. In combination, means for holding the leather and a slitting-knife composed of sections and means for reciprocating the sections in relation to each other in the direction of the cut to thrust the point of the sections alternately in advance, substantially as described. 25

7. In combination, the clamping means comprising the two pairs of levers with means for opening and closing the same, the spring-plates extending across between the pairs of levers, a slitting-knife and feeding mechanism for the leather, substantially as described. 30

In testimony whereof I affix my signature in presence of two witnesses.

ALONZO L. SWEET.

Witnesses:

F. L. MIDDLETON,
HENRY E. COOPER.