(No Model.)

H. G. FOSS.

LEATHER SPLITTING AND SKIVING MACHINE.

No. 343,238. Patented June 8, 1886.

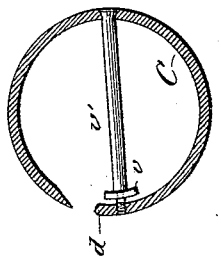

Fig. 4.

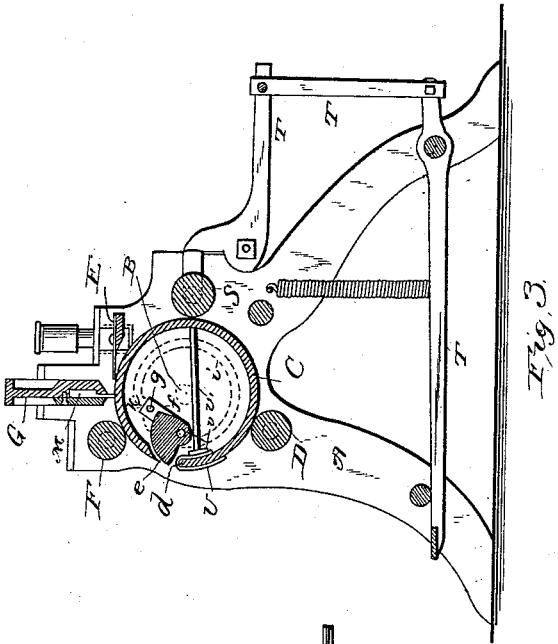

Fig. 3.

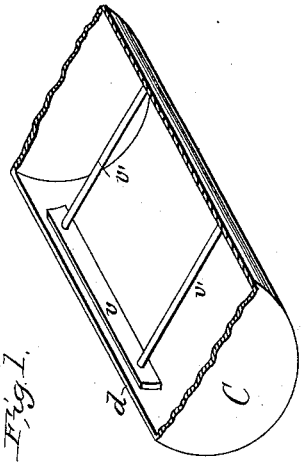

Fig. 1.

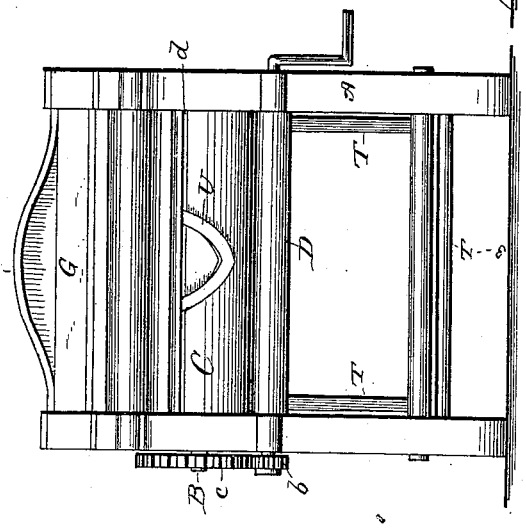

Fig. 2.

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UNITED STATES PATENT OFFICE.

HORATIO G. FOSS, OF AUBURN, MAINE.

LEATHER SPLITTING AND SKIVING MACHINE.

SPECIFICATION forming part of Letters Patent No. 343,238, dated June 8, 1886.

Application filed December 15, 1885. Serial No. 185,752. (No model.)

To all whom it may concern:

Be it known that I, HORATIO G. FOSS, a citizen of the United States, residing at Auburn, in the county of Androscoggin and State of Maine, have invented certain new and useful Improvements in Leather Splitting and Skiving Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement on that class of machines which are designed to split leather and in which the material is carried by a revolving cylinder to a stationary knife, the object being to adapt such machines to the operation of skiving leather in addition to their function of splitting the same.

While my invention is applicable generally to all machines having a stationary knife and a revolving cylinder, it is particularly adapted for use in connection with the machine for splitting and rolling leather described in Letters Patent to Caleb S. Stearns, No. 78,697, dated June 9, 1868.

My invention consists, first, in the combination, with the carrying-cylinder, of a pattern of suitable form and character, which is interposed between the leather to be skived and the carrying-cylinder for the purpose of presenting the required portion of the work to the action of the knife, as hereinafter described and claimed.

My invention further consists in a suitable clamp or plate for holding the said pattern in proper relation with the carrying-cylinder, as hereinafter described and claimed.

My invention further consists in the combination, with the clamping-plate, of screws for securing said plate to the carrying-cylinder and for effecting the required adjustment of the plate, as hereinafter described and claimed.

My invention further consists in the combination of a carrying-cylinder and movable jaws and a clamping-plate and means for operating the same, as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it in detail with reference to the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of the carrying-cylinder with my improved pattern-clamp applied thereto. Fig. 2 is a front elevation of a leather-splitting machine, showing the exposed part of the pattern upon the carrying-cylinder. Fig. 3 is a transverse section of the same on the line 3 3 of Fig. 2. Fig. 4 is an enlarged transverse sectional view of the carrying-cylinder, showing the relation of the adjusting-screws with the cylinder and clamping-bar.

For the purpose of illustration, my invention is shown in the drawings as applied to the machine described in the patent to Stearns, before referred to, and to which patent reference is here made for a fuller description of its construction and operation.

In suitable stationary bearings in the frame A of the machine is revolved a shaft, B, of the carrying-cylinder C. Power is applied to a roller-shaft, D, and is transmitted through a pinion, *b*, on said shaft to a cog-wheel, *c*, on the shaft B, so as to revolve the cylinder C. This cylinder is provided with a longitudinal opening, one edge, *d*, of which constitutes a fixed jaw, which operates in connection with a movable jaw, *e*, to hold the material to be operated upon by a cutting-knife, E.

D is the feed-roll, F the guide-roll, S the presser-roll, and T the treadle-levers for operating the roll S.

G is a presser-bar for holding down the series of section-blocks M upon the leather and pressing it into an opening in the pattern, as hereinafter described.

The movable jaw *e*, before referred to, is pivoted to the sides or ends of the carrying-cylinder C. A rod, *g*, extends longitudinally of the cylinder C through lugs *f* of the jaw *e*, and carries at each end a friction-roller, which works in a cam-groove, *i*, formed in a plate screwed to the inside of the frame. Projections *k* in the cam-grooves *i* engage the friction-rollers of rod *g* and open the jaw *e*, so as to release the work at the required time. Thus it will be seen that at each revolution of the cylinder C the jaws *d e* carry the work to and past the knife E, and the jaw *e* opens to release the work at the completion of the revolution.

Now, in order to enable this machine to simply skive or bevel off the edge of the material, instead of splitting it clear through, as

efore, I provide a pattern, U, which may be f any suitable form, according to the form to e skived, the outer edge of which is made ıicker than the rest in order to produce a evel on the work. This pattern is clamped elow the jaws *d e* and extends out over the ıw *d*, as shown in Figs. 2 and 3. The work ɔ be skived—for instance, a shoe-vamp—is rasped between the jaws *d* and *e* and laps ut over the outer portion of the pattern, and s the cylinder revolves the work is carried ɔward the knife, which acts only upon that art which is raised up by the pattern, and kives or bevels off such part. At the end of ach revolution of the cylinder the work is re-ɛased by the movable jaw *e*, and is then re-ıoved and other work introduced.

In order to clamp the pattern, I provide a ar or plate, *v*, of metal, and secure it within ıe cylinder C, just below the fixed jaw *d*. wo screws, *v' v'*, are used to hold the plate *v*, ıid screws passing across the cylinder, their eads, which are at the back of the cylinder, eing countersunk beneath the surface of the ıme. By setting up the screws the pattern ɜ clamped between the inside of the cylinder nd the face of the plate *v*, and by loosening ıe screws the clamp-plate is drawn back so s to release the pattern.

I do not wish to be understood as confining ıyself to the application of my improvement ɔ the particular mechanism herein described, ecause, as previously stated, the improve-ıent is applicable to other machines for simi-ır work. It is obvious, also, that other means han screw-bolts herein described may be adapted for operating the pattern-clamping bar without departing from my invention.

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

1. The combination, with the carrying-cylinder of the leather splitting or skiving machine and the work-holding devices thereof described, of a pattern and means, substantially as described, for holding the same beneath the work, as set forth.

2. An improved attachment for skiving or splitting machines, consisting of a pattern-holding clamp located within the carrying-cylinder and constructed to hold a pattern beneath the work to be skived, substantially as set forth.

3. The combination, with the carrying-cylinder, of the clamping bar or plate and the screw for adjusting the same, substantially as specified.

4. The combination, with the carrying-cylinder and its work-holding jaws, of the pattern-clamping bar, substantially as shown and described.

5. The combination of the stationary knife, revolving carrying-cylinder, the work-holding jaws, their operative connections, the pattern, and the pattern-holding bar or plate and its adjusting-screws, as set forth.

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

HORATIO G. FOSS.

Witnesses:
JOHN A. MORRILL,
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