

G. REYNOLDS.

Machinery for Splitting Leather.

No. 147,172.

Patented Feb. 3, 1874.

FIG. 1

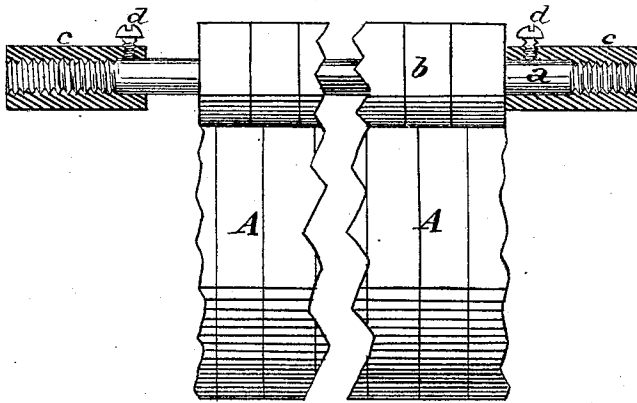


FIG. 2

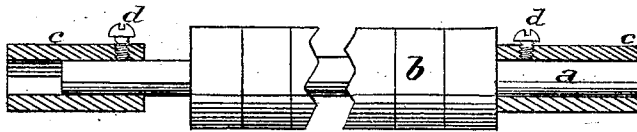
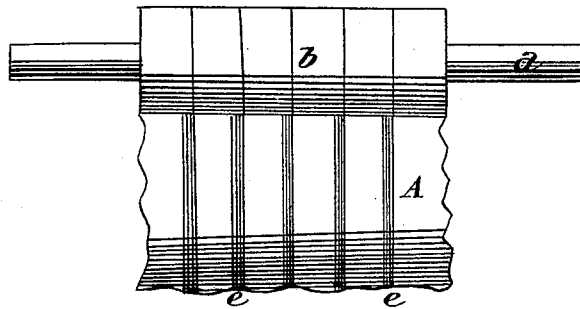


FIG. 3



WITNESSES.

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INVENTOR

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By T. W. Porter Atty

UNITED STATES PATENT OFFICE.

GEORGE REYNOLDS, OF WOBURN, MASSACHUSETTS.

IMPROVEMENT IN MACHINERY FOR SPLITTING LEATHER.

Specification forming part of Letters Patent No. 147,172, dated February 3, 1874; application filed November 14, 1871.

To all whom it may concern:

Be it known that I, GEORGE REYNOLDS, of Woburn, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Belt-Knife Leather-Splitting Machines, of which the following is a specification:

My invention relates to the sectional roller, which is placed directly beneath the knife, and which I so construct and arrange that it shall be capable of a limited end adjustment relatively to the rubber roll; the object of my invention being to prevent the rings of which said sectional roll is composed from wearing unevenly into the rubber roll, and causing annular grooves therein.

In the accompanying drawings, Figure 1 is a side elevation, showing the sectional and rubber rolls, and the means of adjusting the former roll. Fig. 2 is a similar view of a modification of the means of adjustment, and Fig. 3 is a similar view of the rolls as heretofore constructed and arranged.

Similar letters of reference indicate corresponding parts in the several figures.

In the drawings, A represents the rubber roll, which is constructed and arranged in the usual manner. *a* is the arbor of the small or sectional roll, the annular rings or sections *b* being placed upon this arbor through the entire length of roll A. *cc* are adjustable collars secured upon arbor *a*, either by male and female screw-threads and set-screws *d*, as shown in Fig. 1, or by set-screws alone, as shown in Fig. 2. The rings *b* being formed with a hole through them of a larger diameter than that of arbor *a*, in order that each may have a limited lateral action independent of the arbor, that they may conform to the irregularities of

the leather against which they bear, therefore, when, as has heretofore been the practice, they traverse the same track continuously around roll A, uneven grooves are soon worn in the face of the roll, as shown at *e*, Fig. 3, which prevent roll A from presenting the face of rings *b* fairly against the leather, thus necessitating the frequent turning off or smoothing of rolls A, which is attended with great delay and expense; but by occasionally changing the relative positions of these two rolls, as is represented in Fig. 1, the tendency of rings *b* to wear irregular grooves in roll A is avoided, and this roll is worn evenly throughout its entire surface.

The changing of positions of the rolls may be automatic, or occasionally by hand, as described, and the means may be the same shown in Figs. 1 and 2, or any equivalent device which shall effect the desired result.

A practical test of the economy and usefulness of my invention has demonstrated that it effects a saving of sixty-seven per cent. of the usual wear of the rubber roll, besides the delay incident to its frequent refacing when undergoing that process.

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

The adjustable collars *cc*, or their equivalents, in combination with shaft *a*, rollers *b*, and the elastic roll A, substantially as and for the purposes specified.

GEORGE ^{his} × REYNOLDS.
mark.

Witnesses:

N. J. SIMONDS,
SPARROW HORTON.