H. A. HOUSE.

Instrument for Planing Hides and Skins.

No. 212,555. Patented Feb. 25, 1879.

Fig. 1.

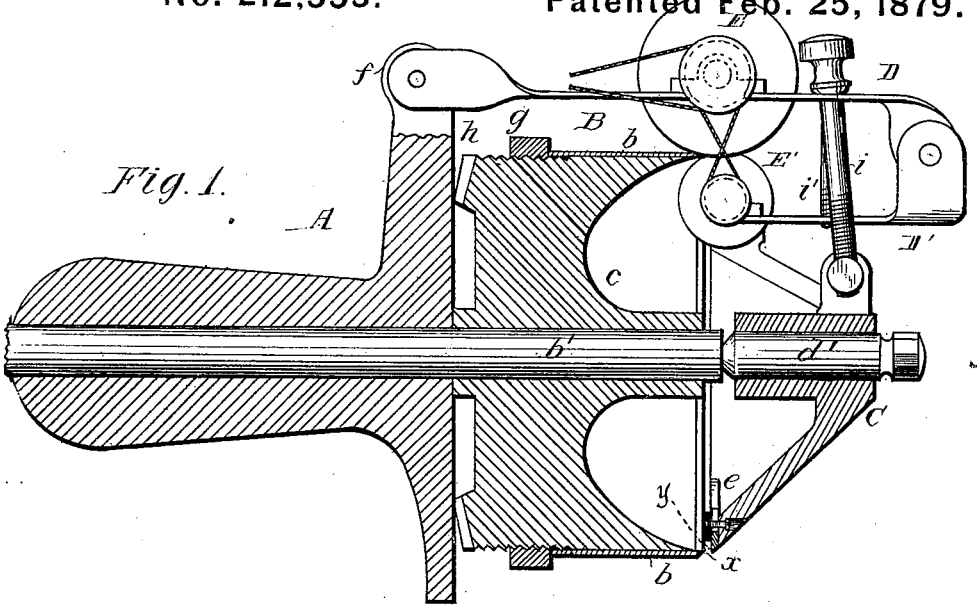


Fig. 2.

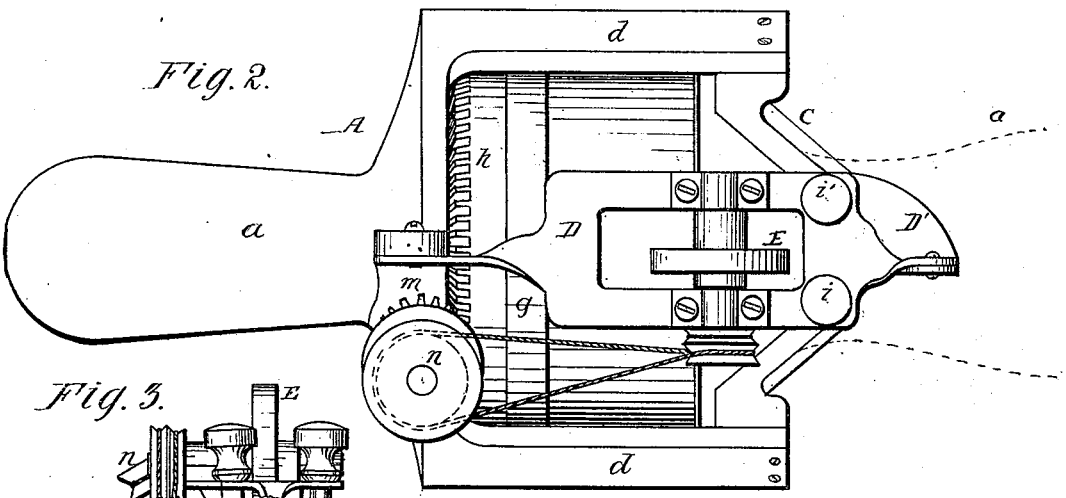
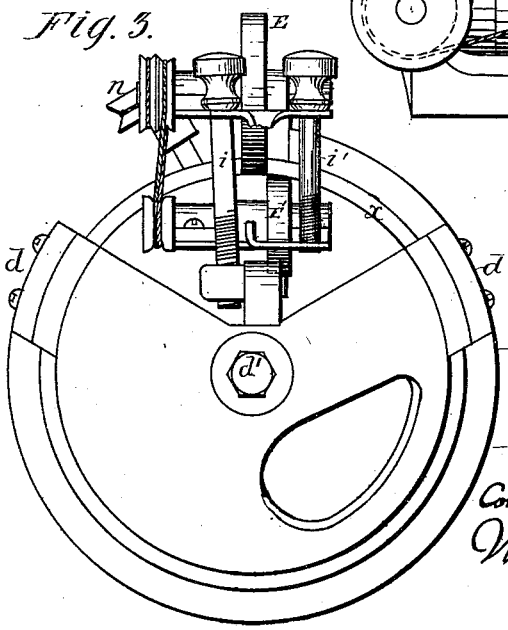


Fig. 3.



Attest:

Courtney A. Cooper.

William Paxton

Inventor

H. A. House

By his attorney

Charles E. Foster

UNITED STATES PATENT OFFICE.

HENRY A. HOUSE, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN INSTRUMENTS FOR PLANING HIDES AND SKINS.

Specification forming part of Letters Patent No. **212,555**, dated February 25, 1879; application filed December 5, 1878.

To all whom it may concern:

Be it known that I, HENRY A. HOUSE, of Bridgeport, Fairfield county, Connecticut, have invented an Improved Instrument for Planing Hides, &c., of which the following is a specification:

My invention is a device intended, mainly, for shaving the inner skin from hides, &c., although capable of use for other like purposes; and consists of a tool which may be passed by the hand over the hide, provided with a cutter which is driven by power, as hereinafter described.

In the drawings forming part of this specification, Figure 1 is a longitudinal section, Fig. 2 a plan view, and Fig. 3 an end view, of my improved implement.

The machine consists, essentially, of a frame, A, provided with one or more handles, *a*, arranged to facilitate its convenient manipulation, and a tool or cutter, B, connected to or driven by a shaft, *b'*, turning in the frame, and operated by any suitable motor through the medium of a flexible shaft, bands, or other available gear.

The cutter B may be of any suitable description, consisting, preferably, of a head, *c*, carrying an annular blade, *b*, sharpened at the outer edge, *x*. To arms *d* of the frame, which extend beyond the edge of the blade, is bolted a cone-like nose or end piece, C, carrying the center-pin *d'* of the shaft *b'*, to which the cutter is secured, and provided with an adjustable curved plate, *e*, forming the throat-piece, opposite the edge of the center.

To a stud, *f*, on the frame A is pivoted a frame, D, in which turns the shaft of a sharpening-wheel, E, of emery or other material, the said frame being adjustable by means of a set-screw, *i*.

To the outer end of the frame D is pivoted the inner end of a frame, D', carrying the shaft of a sharpening-wheel, E', and adjustable by means of a screw, *i'*, the wheels being arranged to act upon the opposite sides at the edge of the blade *b*.

The blade is adjustable upon the head *c* by means of a ring follower or carrier, *g*.

At the rear of the head *c* is formed an annular rack, *h*, which gears with the pinion *m* of a sleeve turning on a stud on the frame, and carrying a pulley, *n*.

A band from the pulley *n* passes to a pulley on the shaft of the wheel E, another band communicating motion from said shaft to that of the wheel E'.

On a rotary motion being imparted to the cutter, the wheels E E' will be rotated, and will sharpen the edge of the cutter, as it passes below them, and maintain it in an effective working condition, the necessary adjustments to compensate for wear being effected by means of the screws *i i'* and follower *g*.

The hide is stretched across a suitable frame, and the operator, grasping the tool by the handle, manipulates it like a wood-plane, bringing the point *x*, Fig. 1, to bear on the inner side of the hide, so that the cutter shaves off slices equal in thickness to the width of the throat *y*, which, as before stated, may be regulated by adjusting the plate *e*.

When the tool is large or heavy it may be suspended by means of a chain and counterweight, or from suitably-balanced arms.

Heretofore cutting-tools have been used in connection with tables for supporting the hides, the tool operating in positive guides, so that no allowance could be made for variations in thickness of different parts of the hide, the cut being deepest where the hide was thickest.

The above-described implement acts upon the tightly-stretched hide, so that a shaving of any desired width may be taken off, at the will of the operator, who manipulates the implement according to the character of the part operated on, without regard to varying thickness of the hide at different points.

I do not restrict myself to the precise construction and arrangement of parts described, nor do I here claim the combination of a rotating head and annular cutter adjustable thereon, as this may constitute the subject of a separate application for Letters Patent; but

I claim—

1. An instrument for planing hides, &c., consisting of a frame provided with a handle or handles, and an annular revolving plan-

ing-tool carried by the frame, and constructed to be driven from an independent motor, substantially as set forth.

2. The combination of the portable frame A, provided with handles, radially-adjustable throat-piece *e*, and revolving tool B, substantially as set forth.

3. The combination, with the annular blade *b*, adjustable on the head *c*, of the grinding-wheels E E′, carried by adjustable frames D D′, and driven from the revolving head, substantially as set forth.

4. The combination, with the revolving cutter, of a nose or end piece and plate *e*, radially adjustable on the nose, substantially as set forth.

5. A portable planing-tool provided with an annular blade, revolving with its edge opposite a throat-piece, *e*, and constructed to be driven by a flexible shaft, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses

HENRY A. HOUSE.

Witnesses:

GEORGE C. BISHOP,

HARRY A. HOUSE, Jr.