(No Model.)

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## L. F. ZIEGER.

MACHINE FOR CUTTING FURS.

No. 289,594.

Patented Dec. 4, 1883.

Fig1. E ð Ċ Ī A Fig 4. Fig 2. E E B' B B a Ħ Fig 3. E C C 62 -a B^ a a Inventor Lewis J. Gieger VII Я Attest: Geo. J. Smallwood. William J. M. Cinty

N. PETERS. Photo-Lithographer. Washington, D. C.

## UNITED STATES PATENT OFFICE.

LEWIS F. ZIEGER, OF PHILADELPHIA, PENNSYLVANIA.

## MACHINE FOR CUTTING FURS.

SPECIFICATION forming part of Letters Patent No. 289,594, dated December 4, 1883. Application filed May 24, 1983. (No model.)

To all whom it may concern:

Be it known that I, LEWIS F. ZIEGER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State

- 5 of Pennsylvania, have invented certain new and useful Improvements in Machines for Cutting Furs, of which the following is a specification, reference being had therein to the accompanying drawings.
- <sup>10</sup> This invention relates to a new and improved machine for cutting furs to be used as trimmings, and has for its object to provide a machine adapted to cut furs having a thick or thin skin in such a manner that the hair
- 15 shall remain uninjured, and capable of being adjusted to cut trimmings of any desired width, the whole being arranged in such manner that the fur shall be firmly held in place in order to insure a straight cut, and the entire pelt
  20 cut in one operation of the machine, as will
- 20 cut in one operation of the machine, as will more fully hereinafter be described, due reference being had to the accompanying drawings, forming part of this specification, wherein-
- 25 Figure 1 represents a perspective view of my improved device; Fig. 2, a transverse section; Fig. 3, a longitudinal section of the same, and Fig. 4 a view of the pelt after having been cut.
- 30 The letter A indicates the bed or base of the machine, and is provided with studs or pins secured in the same in any suitable manner.
  - B indicates a hinged frame, hinged to the base, as shown, and is provided with a series
- 35 of slats, B', placed equidistant from each other, and just sufficiently far apart to admit of the passage of the knives, as will more fully here-inafter appear. To each side of the hinged frame are secured grooved strips b, each pro-40 vided with a groove, b'.
- C indicates a sliding frame or carriage, having lugs or projections c, adapted to fit the grooves b', said frame or carriage being adapted to freely reciprocate back and forth in the
- 45 hinged frame B. This frame is composed of three bars placed substantially the same distance apart, and united at their ends by crossbars, as shown, said cross-bars being provided with lugs *e*, as above described. To each of
- 50 the outside bars of this frame are secured bars D, provided upon their inner faces with vertical slots d, to receive the knives E. These

slots or grooves are placed equidistant apart, in practice about one-quarter of an inch, and are so placed that the slots will exactly regis- 55 ter with the spaces between the guide-slats of the hinged frame B, above described. The cutting-knives are placed in these slots d, and are securely held in place by means of setscrews e. The central bars of the frame or 60 carriage C is provided with any suitable handle, by means of which the carriage, with the knives, can be reciprocated back and forth. At each end of the grooves b' are secured These blocks are slotted, as shown, 65 blocks  $b^2$ . and secured in place by bolts and nuts, and are designed to limit the movement of the reciprocating carriage or frame C. The said blocks  $b^2$  can be adjusted to admit of a greater or less movement of the said carriage by loos- 70 ening the nuts and moving the blocks forward or backward and rescrewing the nuts, as will readily be seen.

In practice I prefer to construct the bars D, carrying the knives, and the grooved side 75 strips, b, of brass, and the rest of the machine, excepting the bed-piece, which is preferably of wood, I make of iron; but the machine may be formed of any suitable material without departing from the spirit of my invention. 80

The operation of the device is as follows: The hinged frame B is raised, and the fur-skin to be cut is then placed, fur downward, upon the pins a. These pins are arranged in rows, so that each row of pins will come substantially 85 beneath each guide-slat B' of the hinged frame B, and the cutting-knives will pass between The said pins being sharpened at the rows. the extremities, the frame B, upon being closed, forces the pelt down upon the pins, and the 90 pins enter the skin just far enough to hold the pelt in place and prevent the same from moving laterally, and the fur passes down beneath the plane of the points of the pins. The knives having been adjusted to the proper 95 distance apart-that is to say, if we wish to cut the fur into strips of three inches in width, we place a knife in every twelfth groove of the knife - carrying bars D-the carriage C is grasped by its handle and pushed quickly for- 100 ward, and the entire pelt is cut in one operation into strips. The knives are made vertically adjustable by means of the set-screws e, as before described, and are adjusted so as to project

just sufficiently far beneath the guide-slats of the hinged frame B as to cut completely through the skin, but no farther, thus obviating the danger of cutting the fur or hair; and the shanks of the knives should be made long enough to permit of the knives being adjusted to cut skins of any known thickness or thinness. It will thus be readily seen that the fur-skin, no matter how thick or thin it may be, can be quickly and thoroughly cut without any injury to the fur or hair.

In cutting furs for trimmings the furs vary in color and the skins in thickness, and where a great number of skins have been cut into 15 strips, the strips of different thicknesses and

- shades become mixed, necessitating, in applying the trimming to goods, much labor and trouble in assorting the same, and in order to obviate this difficulty, in cutting the furs into
  20 strips I leave a very small portion of the same upper proferable of the same o
- uncut, preferably at the center of the pelt, so that all the strips of one pelt are attached until they are ready to be applied to the goods to be trimmed, when they can be separated by any
- 25 suitable means. To cut the pelt in this manner, I have shown the sliding carriage C provided with two knife-carrying bars provided with knives, said bars being placed at such a distance apart that when in position for cut-
- 30 ting one set of knives shall be over a point near the center of the pelt to be cut, and the other set at the edge of the same, and upon pushing the frame forward to its limit of movement the first-mentioned set of knives will cut
- 35 from near the center of the pelt completely to one edge, and from its other edge to not quite the center of beginning of the cut of the firstmentioned set of knives, leaving the pelt cut into strips, but all of said strips being united,
- 40 as above described, and as shown in Fig. 4 of the drawings. The movement of the carriage to cut pelts of different sizes can be adjusted by means of the blocks or stop  $b^2$  before described. Having fully described my invention, what I

claim, and desire to secure by Letters Patent, 45 is—

1. The combination, in a fur-cutting machine, with the bed or base A, having the frame B hinged thereto, said frame being provided with guide-slats B', of the reciprocating carriage C, 50 carrying knives E adapted to pass under and between the said guide-slats B', substantially as described.

2. The combination, in a fur-cutting machine, with the bed or base A, provided with pins a, of 55 the frame B, hinged to said base A, and having guide-slats B', and the reciprocating carriage C, carrying knives E, substantially as described.

3. The combination, in a fur-cutting machine, of the bed or base A, provided with pins a, the 60 frame B, hinged to said base A, and having guideslats B', and the reciprocating carriage C, carrying vertically - adjustable knives E, substantially as described, and for the purpose specified. 65

4. The combination, with the bed or base A, provided with pins a, of the frame B, hinged to said bed A, and having guide-slats B', the reciprocating carriage C, carrying verticallyadjustable knives E, and the stops  $b^2$ , adapted 70 to limit the movement of the said carriage C, substantially as described and shown, and for the purpose set forth.

5. The combination, with the bed or base A, provided with pins a, of the frame B, hinged to 75 said bed A and having guide-slats B', and the reciprocating carriage C, carrying two sets or series of knives, the whole constructed and arranged so as to cut the pelt into a number of strips all united at or about their centers, sub- so stantially as described and shown, and for the purpose set forth.

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

LEWIS F. ZIEGER.

Witnesses:

WILLIAM J. MCGINTY, VINTON COOMBS.