

(No Model.)

N. CHURCHILL & W. C. BAXTER.
HEEL BREAST FINISHER.

No. 520,768.

Patented June 5, 1894.

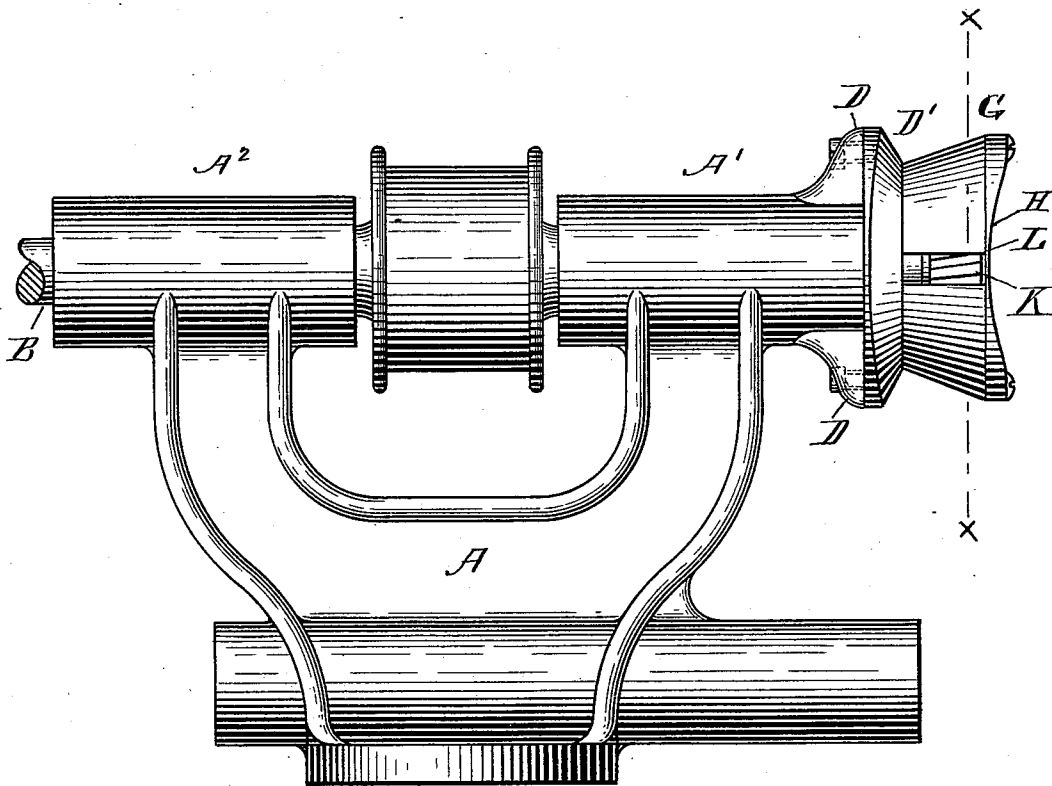


FIG. 1.

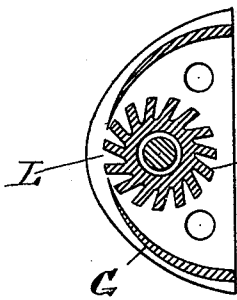


FIG. 3.

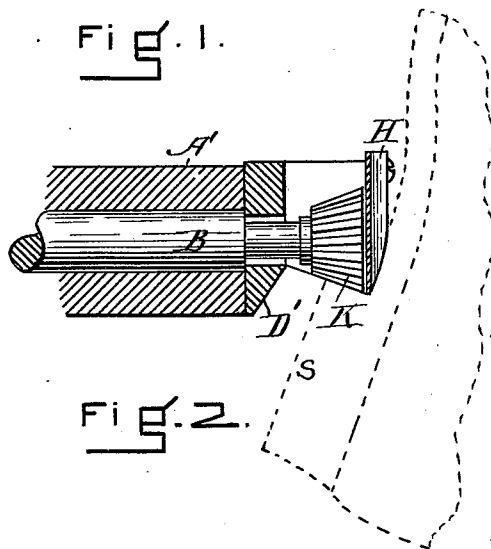


FIG. 2.

WITNESSES

Frank H. Parker
Frank G. Hattie

INVENTORS

Newton Churchill
William C. Baxter

UNITED STATES PATENT OFFICE.

NEWTON CHURCHILL AND WILLIAM C. BAXTER, OF EAST BRIDGEWATER,
MASSACHUSETTS, ASSIGNORS TO THE CARVER COTTON GIN COMPANY,
OF SAME PLACE.

HEEL-BREAST FINISHER.

SPECIFICATION forming part of Letters Patent No. 520,768, dated June 5, 1894.

Application filed August 9, 1893. Serial No. 482,746. (No model.)

To all whom it may concern:

Be it known that we, NEWTON CHURCHILL and WILLIAM C. BAXTER, both of East Bridgewater, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Heel-Breast Finishers, of which the following, taken in connection with the accompanying drawings, is a specification.

Our invention relates to a machine for finishing the breasts of boot and shoe heels, and consists in combining with a coned cutter wheel a coned shield and a sole guard, the object being to make a machine that is simple in construction and rapid and safe in its work. This object we attain by the mechanism shown in the accompanying drawings, in which—

Figure 1 is a view showing in elevation our invention and the connecting parts. Fig. 2 is a view showing parts in horizontal section and plan. Fig. 3 is a cross vertical section taken on line *x-x* of Fig. 1.

We have not exhibited in the drawings the whole frame of the machine, nor all of the parts, but have shown all of the parts that bear any relation to our invention.

In the drawings, we have indicated by *A* the upper part of the frame, to which the cutter shaft and other parts are attached.

A' and *A*² are the housings for the shaft *B*. To the end of the shaft *B* we attach the cutter wheel *K*; this cutter wheel *K* is made about as indicated in the drawings, although the style and number of cutting teeth may be varied.

The cutter wheel *K* is partly covered by a shield piece *D'G* (see Fig. 1); this piece *D'G* is made fast to the machine by means of screws passing through the ears *D D* cast on the housing *A'*. For convenience in adjusting the shield piece *D'G* the holes in the ears *D D* for the screws to pass through may be somewhat longer than the stem of the screw, so that the shield may be moved while

the screws are somewhat slack, and when adjusted the screws may be set up tight, and thus clamp the shield piece firmly in place. The part *G* of the shield piece has an opening as indicated at *L*, Figs. 1 and 3, through which the extreme cutting edges slightly protrude, so that they may cut a very thin shaving from the breast of the heel. The wheel is made to rotate with great rapidity and take but a slight shaving, so that it will leave a fine smooth or polished surface on the breast of the heel.

To guard the sole of the boot or shoe from the action of the cutter, we use a sole guard *H*, Figs. 1 and 2; this sole guard is concaved as shown, so as to fit the convexity of the sole.

The sole guard *H* is attached to the edge of the shield piece *D'G* and forms a base for the coned shield piece as shown.

The dotted lines in Fig. 2 are intended to show the position of the boot or shoe while its heel is being worked upon by our machine, *S* indicating the position of the heel.

We claim—

In a heel breasting machine, the combination of a coned cutter head having knives adapted to cut on their peripheral ends; with an adjustable shield piece covering the cutting edges of the knives and provided with an opening through which the knives may work on the breast of the heel, and the sole-guard said sole-guard being attached to the front edge of the shield piece substantially as described and for the purpose set forth.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, on this 5th day of August, A. D. 1893.

NEWTON CHURCHILL.
WILLIAM C. BAXTER.

Witnesses:

FRANK G. PARKER,
FRANK G. HATTIE.