(No Model.)

D. STEWART.

MACHINE FOR CUTTING TIE BANDS FOR BUNDLING SHINGLES.

No. 303,893. Patented Aug. 19, 1884.

Fig. 1.

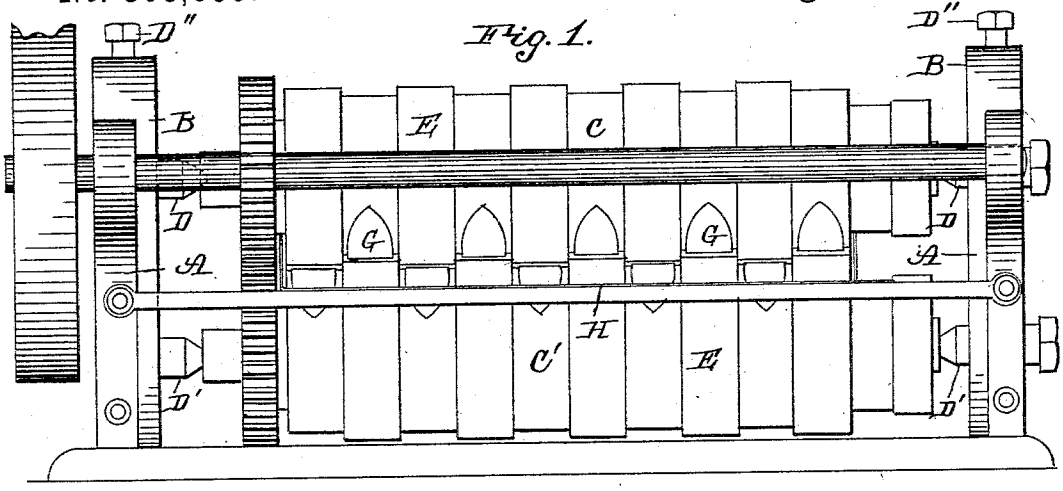


Fig. 2.

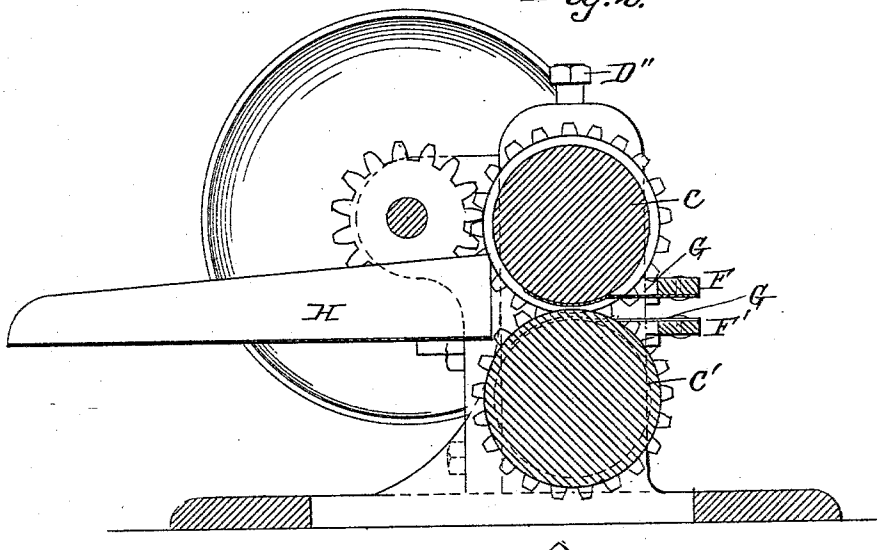
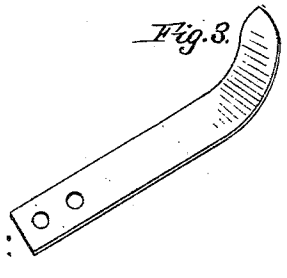


Fig. 3.



Witnesses:
J. W. Garner
A. S. Pattison

Inventor.
David Stewart,
per
F. A. Lehmann, atty.

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

UNITED STATES PATENT OFFICE.

DAVID STEWART, OF SHARPSBURG, PENNSYLVANIA.

MACHINE FOR CUTTING TIE-BANDS FOR BUNDLING SHINGLES.

SPECIFICATION forming part of Letters Patent No. 303,893, dated August 19, 1884.

Application filed November 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, DAVID STEWART, a citizen of the United States, residing at Sharpsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Shingle-Band Cutters, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in shingle-band cutters; and it consists in preparing rolls for rapidly cutting sheets of metal to form strips for binding together or packing shingles in bundles by surrounding them with steel bands placed at intervals, the bands on one roller entering the intervals on the other and being brought in close contact, by which the intervening sheet is cut; and it consists, also, in the manner of clearing the rolls from the strips during the process of cutting, hereinafter fully described.

The accompanying drawings represent my invention.

Figure 1 is a front elevation. Fig. 2 is a vertical cross-section. Fig. 3 is a detail.

A represents a frame on a base, and B standards for the support of two horizontal rolls, C C′, placed vertically, the one over the other. Through the standards pass set-screws D D′, the ends of which serve as pivots on which the rolls revolve. In the standards are slots in which blocks are placed, through which the screws D pass, which blocks, by means of the screw D″, can be raised or lowered to separate or bring the rolls nearer together.

The rolls C C′ are made of hard wood, of equal diameter, and are geared to turn in opposite directions. They are surrounded by steel bands E, of equal width, and at a distance from one another equal to the width of the bands. The bands are placed on the two rolls in such manner that those on one enter into the vacant spaces of the other, and their edges approach each other as closely as possible without interlocking.

Attached to the rear of the standards B are two horizontal flat bars, F F′, at a short distance the one over the other, placed nearly opposite the point of contact of the rolls, and affixed to them at their sides facing each other are flat steel springs G, that enter into the vacant spaces between the bands on both rolls. The springs attached to the under side of the bar F are bent upward to clasp from below about one-fourth part of the circumference of the upper roll, C, and those on the lower bar, F′, are bent downward to reach equally over the top of the lower one. The forward ends of the springs are in uninterrupted contact with the rolls between the bands, for the purpose of lifting the narrow strips of metal, after being cut by the edges of the bands, from the sheet, and leading them from the rolls to pass out between the bars F F′. In front, at a height slightly above the point of contact of the rolls, is a guide, H, from which the rolls are fed.

The metal sheets to be cut into strips for packing or bundling shingles are first to be punched with nail-holes, so that when cut the strips are ready for use. The sheets, of a width equal to the length of the rolls, are placed singly on the guide H and pushed between the rolls, when they will be cut by the edges of the bands on the rotating rolls. As soon as the operation has begun the ends of the strips pass on to the forward ends of the springs G, and, sliding over them through the space between the bars F F′, drop to the ground.

I prefer to make the rolls of hard wood, because it facilitates the removal and replacing of the bands when their edges require sharpening or when changes have to be made; but metal rolls may be substituted for the wooden rolls.

Having thus described my invention, I claim—

In an apparatus for cutting metallic sheets into strips for making tie-bands for bundling shingles, the rolls C C′, with the bands E, in combination with the springs G and bars F F′, substantially as described.

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

DAVID STEWART.

Witnesses:

LOUIS MOESER,

T. F. LEHMANN.