(No Model.)

J. GILLESPIE.

NUT BAR.

No. 314,329. Patented Mar. 24, 1885.

Fig. 1.

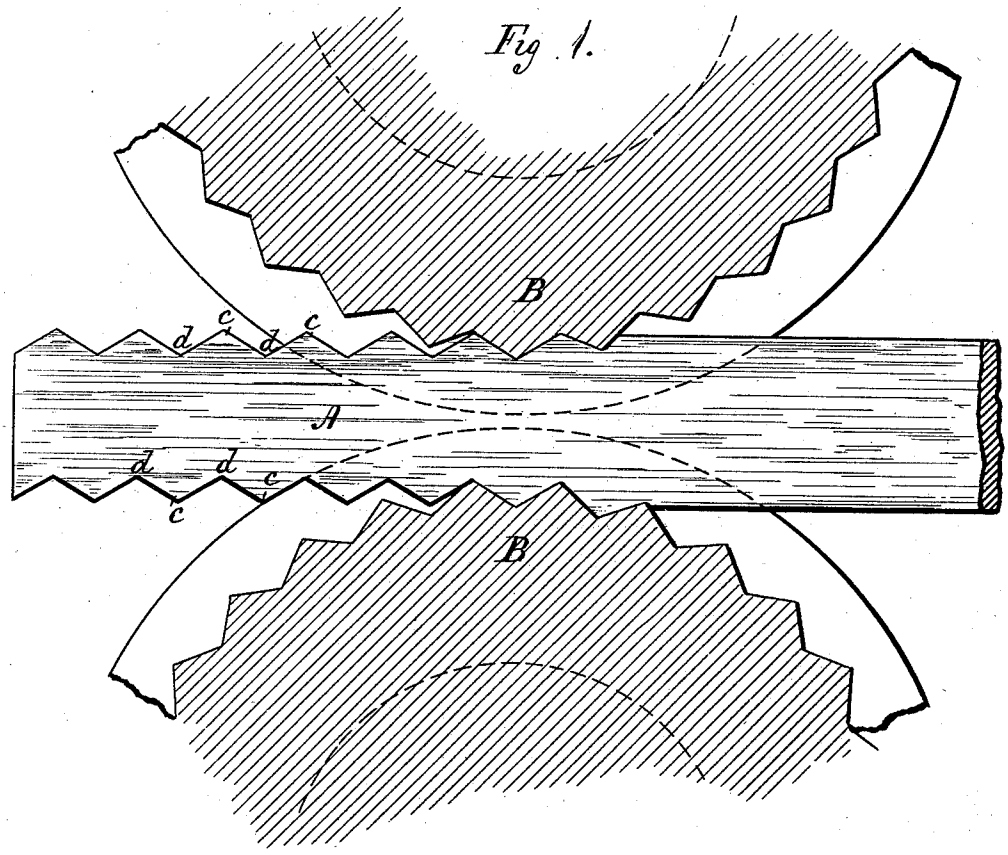
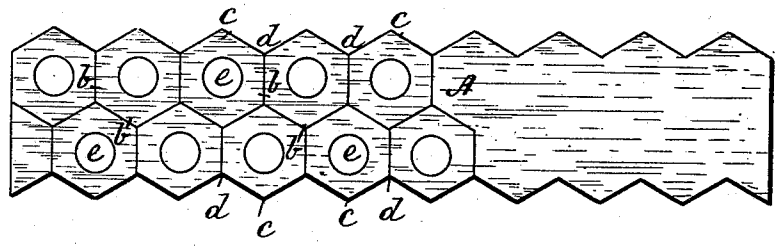


Fig 2.



WITNESSES:

John Cook

C. Sedgwick

INVENTOR:

J. Gillespie

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES GILLESPIE, OF SPRINGFIELD, ILLINOIS.

NUT-BAR.

SPECIFICATION forming part of Letters Patent No. 314,329, dated March 24, 1885.

Application filed July 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES GILLESPIE, of Springfield, in the county of Sangamon and State of Illinois, have invented a new and Improved Nut-Bar, of which the following is a full, clear, and exact description.

This invention relates to rolled nut-bars for making hexagonal nuts. Ordinarily said bars are passed between flanged rolls serrated or notched on their peripheries, and having their serrations so arranged that the salient angles of the serrated surfaces of the rolls press at opposite points on the opposite edges of the bar. This makes a nut-bar which is composed of a series of nut-blanks in single file, and to produce the nuts it is only necessary to sever the blanks in straight transverse lines where the opposite depressions in the edges of the bar occur, and to punch the usual holes in the blanks. The form of the nut-bar thus produced has always been more or less imperfect, for the reason that there is necessarily a constantly-varying difference in the width of the bar, its width where the opposite depressions in its opposite edges occur being much less than the opposite salient angles thereon. Consequently in rolling the bar the compression or reduction to form the depressions in its edges is very much greater at said points than at intermediate points where the salient angles are formed on the bar. The result of this is that if the bar be of sufficient width and thickness to perfectly form the salient angular portions on it, then it will fill up in the depressions—that is, the iron will be forced out at the joint or place where the two rolls are nearest each other, thus forming a fin on the bar; or if the bar be of reduced dimensions, so that it will not overfill in the depressions, then the salient angular portions of it will be imperfectly formed.

My invention obviates these defects; and it consists in a nut-bar of suitable width to form a double row of hexagonal nuts, and with the angular depressions in its opposite edges arranged to alternate with each other, whereby the notched bar will be of the same width at any and every point throughout its width, thus doing away with all undue compression or reduction at any one point more than another in the length of the bar as it passes in between or through the rolls, which should have their serrations arranged to produce such alternate notched construction on the opposite edges of the bar. From the bar thus formed the nuts may be stamped or cut with the same saving of waste—that is, the utilization of the entire bar—as is practicable with a bar composed of a series of nut-blanks in single file over or as compared with the great waste incidental to the hand method of making nuts from a straight bar of suitable width.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 represents a face or side view of a portion or section of my improved nut-bar in the course of formation by a pair of suitably-constructed rolls, shown only in part; and Fig. 2, a face view of a piece of the finished bar, showing a portion of it as the double row of nuts are cut or stamped therefrom.

A indicates the nut-bar, of a width suitable for making a double row of hexagonal nuts, *b b'*, Fig. 2. This bar is notched or serrated in each of its opposite edges, to form two sides of each hexagonal nut, by passing it between serrated or notched rolls B B, the serrations in which are so pitched that when the rolls act upon the bar the salient-angular portions of the one roll alternate with those of the other; or, in other words, the angular portions of the one roll come opposite the depressions in the other, thus alternating the salient angles *c* on either one edge of the bar with the like angles on the other. This insures a uniformity of width throughout the notched bar at any point in its width, and so does away with any undue compression or reduction at any point in its length, as and for the purposes hereinbefore described, the transverse measurement being the same from the either salient angle *c* on either one edge of the bar to the depressions *d* on the opposite edge thereof, and also the same at any intermediate portion. From the bar thus formed alternately with salient angles and depressions on its opposite edges the double row of nuts *b b'* may be cut or stamped without any more waste than is due to the punching of the holes *e* in the nuts.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A hexagonal nut-bar of equal width through-

out its length, the same being made of a width to provide for duplicate rows of hexagonal nuts being cut or stamped from it, and with the salient angles on either one of its edges being arranged to alternate with the salient angles on the other edge thereof, and to occupy opposite transverse positions relatively to the angular depressions in the edges of the bar, substantially as and for the purposes herein described.

JAMES GILLESPIE.

Witnesses:
WM. H. SMITH,
S. MENDENHALL.