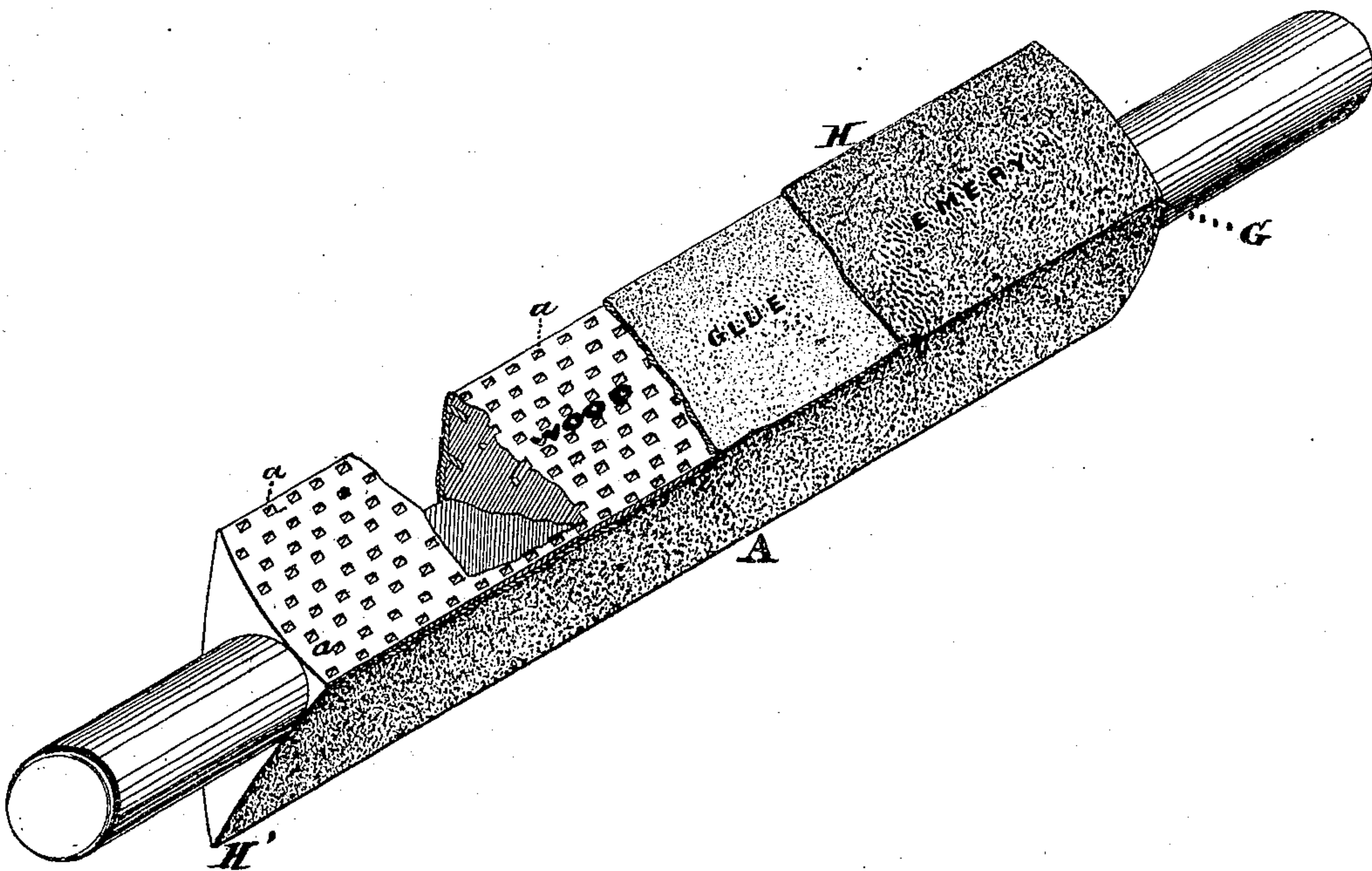


J. R. CLIFFTON.

Improvement in Rifles for Sharpening Harvester-Cutters.

No. 129,103.

Patented July 16, 1872.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN R. CLIFFTON, OF WEST UNITY, OHIO.

IMPROVEMENT IN RIFLES FOR SHARPENING HARVESTER-CUTTERS.

Specification forming part of Letters Patent No. 129,103, dated July 16, 1872.

SPECIFICATION.

I, JOHN R. CLIFFTON, of West Unity, in Williams county and State of Ohio, have invented a new and Improved Rifle, of which the following is a specification:

Nature and Objects of the Invention.

The device consists, first, in providing the surface of the rifle-bar or wooden strip with pits or holes to assist in holding the glue or cement which forms the bed for the emery or other abradent; second, in giving a certain form to the rifle to adapt it to the specific work of sharpening harvester-cutters.

General Description.

In the accompanying drawing, A is a rifle-bar or strip of wood forming the stock to which the cement and emery are attached. The bar A having been brought to the desired shape, the working surfaces are punched with numerous holes, *a a a*. These, when made with a punch—preferably angular in cross-section, say, a “square” punch—will have steep and rough sides, which form an admirable holding-ground for the teats or bulbs which anchor the surface of glue or cement to the stock. Rifles are frequently made, like emery, sand, or glass paper, by spreading a viscid composition upon the stock and then powdering dust of emery or other abradent thereon. As the glue dries it holds the emery firmly and adheres with a certain tenacity to the wood. It, however, is apt to strip off the stock, and I have provided, in the means herein described, a certain mechanical connection between the glue and the wood, which re-enforces the mere adhesive contact. I am aware that rifle-strips have been provided with longitudinal grooves or furrows, but this rugosity does not answer

the purpose for which I provide the pits aforesaid. A merely undulating surface will not afford a holding-surface to enable the glue to lock itself to the wood like the holes which are occupied by the tentacular prominences on the under surface of the glue. The working portion of the rifle is a triangular prism approximating one-half of a parallelopiped divided diagonally and longitudinally. (See figure.) The two sides of this prism, which present a somewhat obtuse angle, are used upon the adjacent edges or bevels of two sections, the angle G, formed by the two sides of the rifle, corresponding with the angle subtended by two adjacent teeth. Thus the rifle is made to whet two bevels at once. This feature is not original with me. There are, however, several interdental spaces near the heel of the cutter-bar which cannot well be reached by the tool used in the manner described; and it is for their benefit that I have provided the acute-angular edges H H', which may be worked in the interdental spaces referred to while the rifle is held so obliquely as to avoid contact with the enlarged part of the cutter-bar near the pitman, as also with the stud on the cutter-bar to which the pitman is connected.

Claim.

I claim as my invention—

A rifle for sharpening harvester-cutters, provided with pits or holes in the faces of the slips for the retention of the glue or cement which holds the abradent, all arranged, constructed, and operated as set forth.

JOHN R. CLIFFTON.

Witnesses:

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