Kilmer & Milliams, Hoof Trimmer. Patented Ann

17.128. Patented Anzel, 1857. Fig.1. Fig.3. Fig. 6. Fig. 8. Fig 7 Witnesses Inventors MBRIBeunes Y Horrer Robert Hilliams Toshua Williams

United States Patent Office.

ROBERT KILLMER AND JOSHUA W. WILLIAMS, OF NEWTOWN, PENNSYL-VANIA, ASSIGNORS TO ROBERT KILLMER.

MPROVEMENT IN BLACKSMITHS' BUTTERISES.

Specification forming part of Letters Patent No. 17,128, dated April 21, 1857.

To all whom it may concern:

Be it known that we. ROBERT KILLMER and JOSHUA W. WILLIAMS, of Newtown, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Improvement in Blacksmiths' Butterises; and I do hereby declare that the following is a full and exact description of thereof, reference being had to the accompanying drawings, and to the letters of

reference marked thereon.

Hitherto the metallic portion of these instruments has been made in a single piece, one end of which was terminated by a blade or bit of square or oblong shape, and having a single cutting-edge. The hoofs of horses being hard and difficult to pare, it frequently happens that blacksmiths must stop in this operation and reset or sharpen their butterises, the edge of which is often dulled by cutting against nails in the hoof. These and other practical difficulties, though apparently small, occasion expense and loss of time, and can be only partially remedied by having several instruments ready for use. Our invention enables us to avoid these difficulties.

It consists in substituting for the blade or bit, above described, a plate of similar form having side flanges, and in providing a number of two-edged bits or blades with edges of differing shapes to suit different parts of the operation of paring horses' hoofs, said bits to be secured to the plate aforesaid by halfflanges and a thumb-screw, or by double flanges, and to be removable, so that they may be changed as the circumstances of the case may

require.

The simplicity and value of our invention will be more easily understood by reference to

the drawings, in which—

Figure I is a perspective yiew of our improved butterise. Fig. II shows the plate and bit detached from the handle. Fig. III shows a plate detached, with double flanges and tapering sides. Figs. IV, V, VI, VII, VIII are front views of bits with edges of differing

shapes, each wire being accompanied by a seetional view of the bit represented.

A, Fig. I, is the plate; BB, Figs. I and II, are half-flanges formed on the sides of plate A. C is a removable bit with two cuttingedges. D is a thumb-screw for fastening the bit in the plate. E E are perforations in the bit for the screw to pass through.

The operation of changing bits is performed with rapidity and ease. It consists in loosening the thumb-screw and sliding the bit out from the plate. It may then be turned end for end and replaced; or, if necessary, another bit of different-shaped edge may be inserted.

Our improvement may be applied in another mode. Make the sides of plate A tapering toward the handle, using the double flanges F F, Fig. III, instead of the half-flanges B B. (Shown in Figs. I and II.) In this case the thumb-screw may be dispensed with, since pressure against the edge of the bit serves only to secure the bit more firmly in the plate.

Our improvement may be applied to the common butterises by turning the sides of their blades, which in them answer to our plates A, so as to form the half or double flanges, as it may be desired to use one or the other of the above-described plans. If the half-flange be used, it will be necessary to employ a thumbscrew.

Haying thus described our improvement, what we claim, and desire to secure by Letters

Patent, is—

The construction of butterises with removable two-edged bits or blades secured to a plate, A, having rectangular sides, by half-flanges B B and a thumb-screw, C, or, when said sides are tapering, by double flanges only, the whole being arranged and operating as set forth.

> ROBERT KILLMER. JOSHUA W. WILLIAMS.

Witnesses:

WM. R. BARNES, G. W. HOOVER.