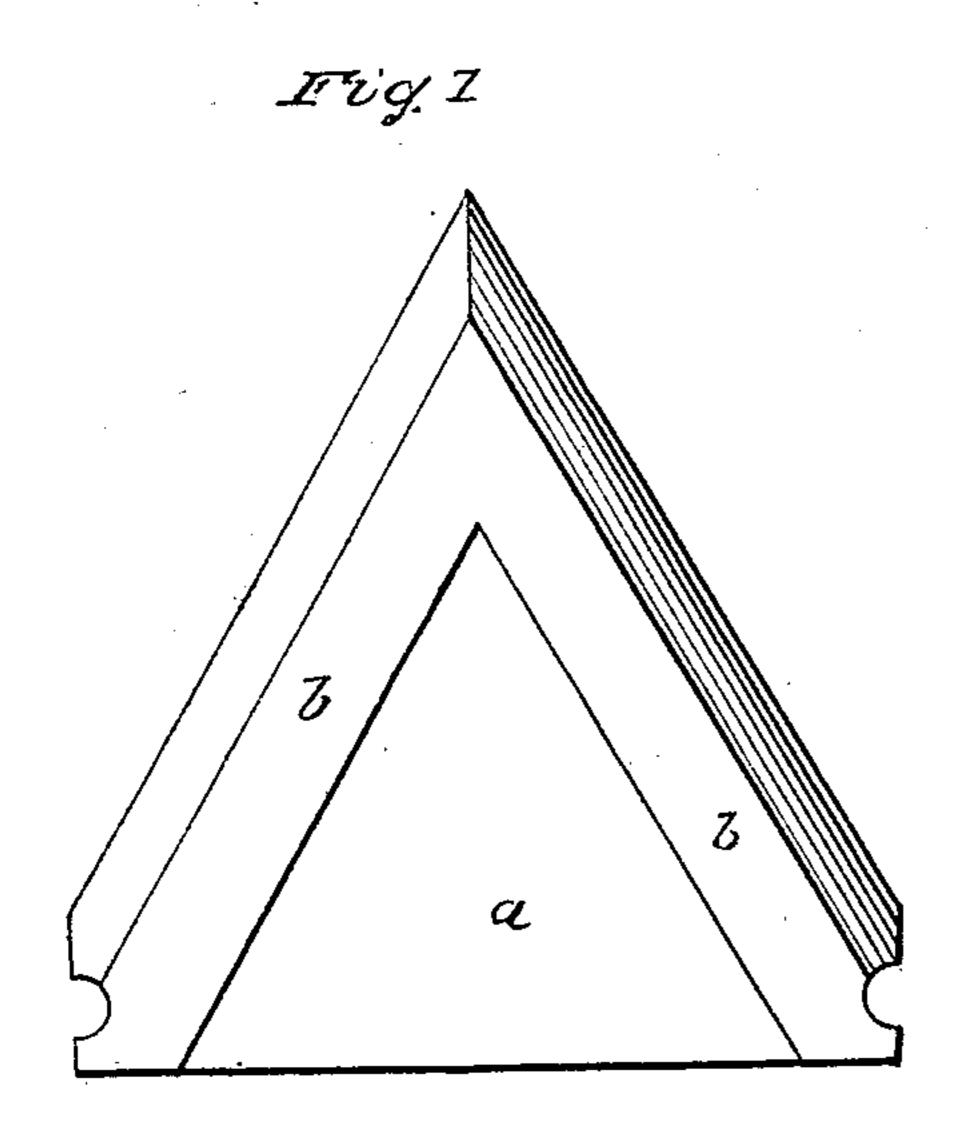
M. G. HUBBARD.

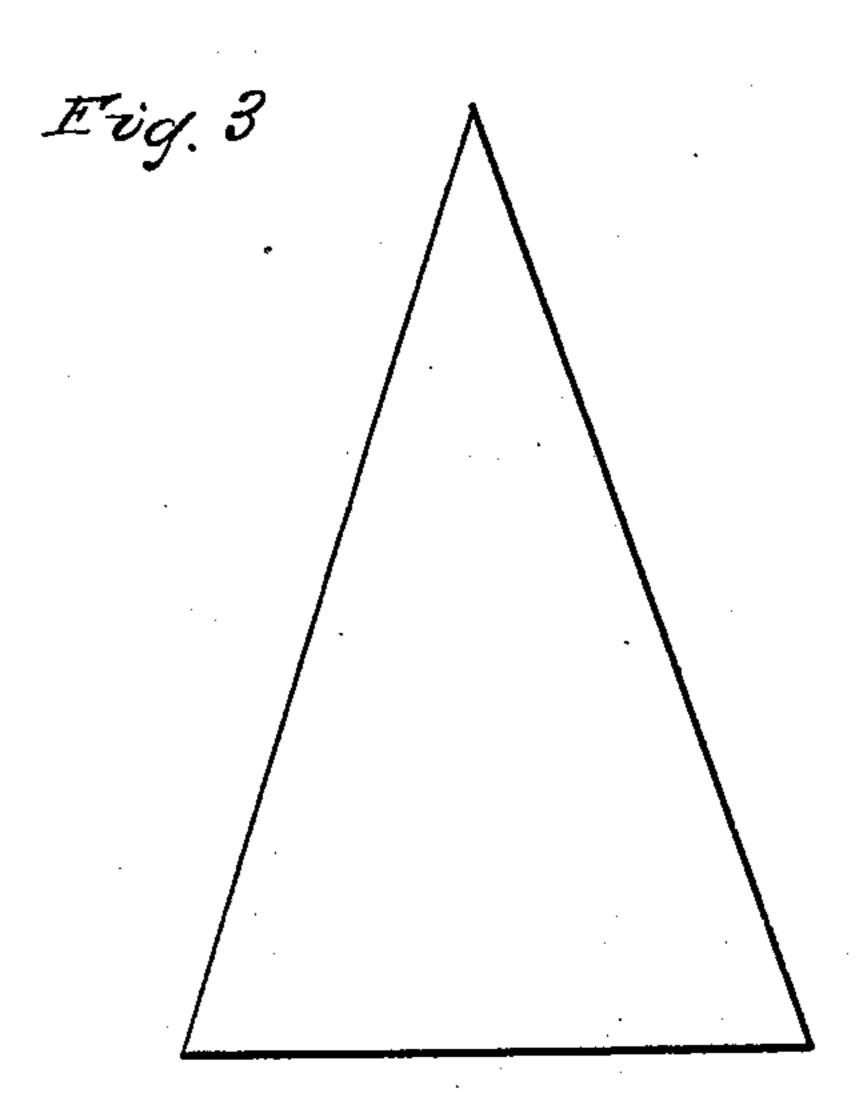
Harvester Cutter.

No. 16,442.

Patented Jan. 20, 1857.







Inventor

United States Patent Office.

M. G. HUBBARD, OF PENN YAN, NEW YORK.

IMPROVEMENT IN CUTTERS FOR HARVESTERS.

Specification forming part of Letters Patent No. 16,442, dated January 20, 1857.

To all whom it may concern:

Beitknown that I, M. G. HUBBARD, of Penn Yan, in the county of Yates and State of New York, have invented certain new and useful Improvements in the Form and Construction of Cutters for Mowing and Reaping Machines; and I do hereby declare the following to be a description thereof, in which my invention is set forth and ascertained, reference being had to the accompanying drawings, in which—

Figure 1 is a top plan. Fig. 2 is an elevation shown in the rear. Fig. 3 is a piece of

steel from which a cutter is formed.

My improvement consists in the form and construction of the cutter. This is composed of one piece of steel, as shown at Fig. 3, of an acute triangular shape, from which I swage out the cutter, either by rolling or hammering the center portion, a, thin and spreading the cutter into the form seen in Fig. 1.

b b are the cutting parts, which are the thickness of the original plate of steel and beveled

to the cutting-edge, as shown in Fig. 2.

My cutter, when complete, is one solid piece, presenting a thick triangular steel cuttingedge, b, with a thin web or center, a, between

and filling up the triangle. The advantage of this form of cutter is to reduce the friction and wear upon it and insure the contact of the cutting-edge against the finger, the web at the same time preventing the choking or clog-

ging in the teeth or fingers.

I do not claim forming the edges of cutters by bending a plate of steel at its edge, and thus making an offset for the cutting-edge, for this has before been done by Hazzard Knowles many years since. From this device my invention differs by forging out a thin web and leaving the edge of the plate thick, as clearly shown in the cross-section of the drawings, so as to form a perfect and flat bearing at the edge, with a shoulder behind.

Having thus fully described my improvements in cutters, what I claim therein as new

is---

The cutter, when formed in one piece, as seen in Fig. 2, constructed substantially as and for the purposes set forth.

M. G. HUBBARD.

In presence of— Wm. S. Hascall, Wm. Greenough.