

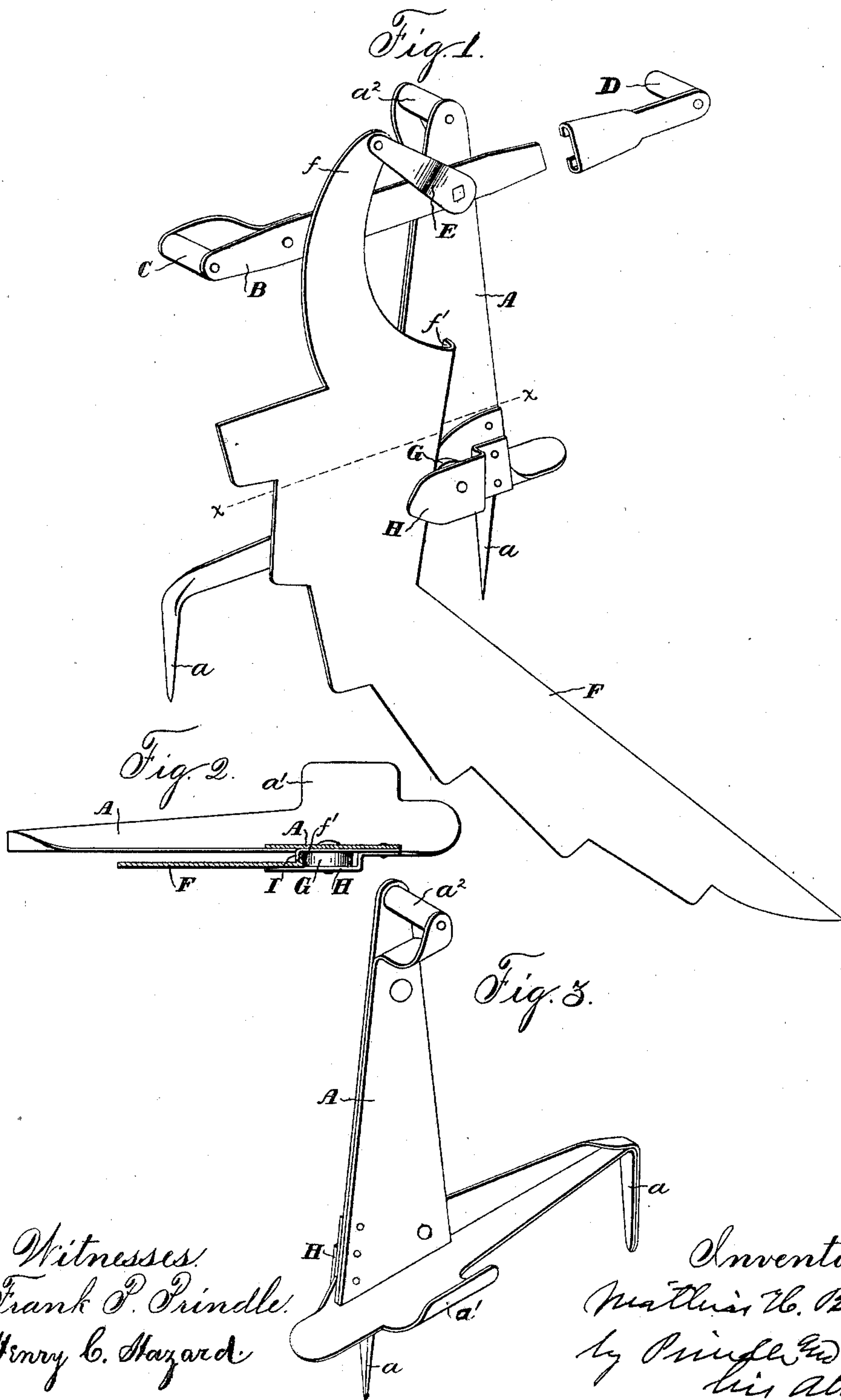
No. 626,522.

Patented June 6, 1899.

M. H. BERMES.
HAY KNIFE.

(Application filed Apr. 7, 1898.)

(No Model.)



Witnesses:
Frank P. Prindle.
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Inventor:
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UNITED STATES PATENT OFFICE.

MATHIAS H. BERMES, OF AURORA, ILLINOIS.

HAY-KNIFE.

SPECIFICATION forming part of Letters Patent No. 626,522, dated June 6, 1899.

Application filed April 7, 1898. Serial No. 676,798. (No model.)

To all whom it may concern:

Be it known that I, MATHIAS H. BERMES, of Aurora, in the county of Kane, and in the State of Illinois, have invented certain new and useful Improvements in Hay-Knives; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a hay-knife embodying my invention; Fig. 2, a horizontal section on the line xx of Fig. 1, and Fig. 3 a detail perspective view of the supporting-frame.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to provide an improved hay-knife; and to this end said invention consists in the construction and combination of parts, substantially as hereinafter specified.

My invention belongs to knives that are used to cut portions of hay from stacks or mows, and in carrying my invention into practice I employ a frame or standard A for supporting the movable parts of the device that is L-shaped and has projecting downward from its horizontal member two tines or sharpened legs a and a , that are designed to be pressed into the hay to hold or steady the device when in use. Projecting horizontally from said frame at the bottom is a flange a' , with its end bent slightly upward, on which the foot is to be placed as a means of holding the device in position. At its upper end the frame A has a horizontally-projecting handle a^2 .

Pivoted to the frame or standard A near its upper end is a lever B, having on opposite sides of its pivot two handles C and D, the latter of which is detachable, so that others of different length may be substituted therefor to enable the leverage to be lengthened or shortened. Attached to and moving with the lever B is an arm E, to the free end of which is pivotally connected the upper end of the shank f of a knife F, that inclines downwardly from a horizontal plane and has, as shown, a cutting edge formed by teeth or

serrations. Projecting from the shank f toward standard A is a rib or flange f' , that inclines slightly from the vertical and on its outer face bears against and rides upon a roller G, journaled between a bracket H and the side of the standard A, and on its inner face engages a lug I, that projects from the side of said standard, said roller and lug thus serving to keep the knife in proper position and guide it in its movements.

All of the parts of my mechanism can be cheaply and well made from sheet-steel cut into shape by dies.

The operation of my device will be readily understood. The tines of the standard A being thrust into the hay-stack and the cutting edge of the knife resting on the latter, either one or two men working the lever B cause an up-and-down and slight rocking motion to be imparted to the knife.

Having thus described my invention, what I claim is—

1. In a hay-knife, the combination of a knife, a lever pivotally connected therewith, a standard to which the lever is pivoted, and means to guide the knife in its movements that permit it to reciprocate and rock, substantially as and for the purpose described.

2. In a hay-knife, the combination of a knife, a lever pivotally connected therewith, a standard to which the lever is pivoted, and guides on the standard for the knife engaging a flange on the knife, substantially as and for the purpose described.

3. In a hay-knife, the combination of a knife, a lever pivotally connected therewith, a standard to which the lever is pivoted, and a guide for the knife consisting of a roller and lug on the standard, engaging a flange on the knife, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 29th day of March, 1898.

MATHIAS H. BERMES.

Witnesses:

GEO. T. PRINDLE,
E. T. PRINDLE.