

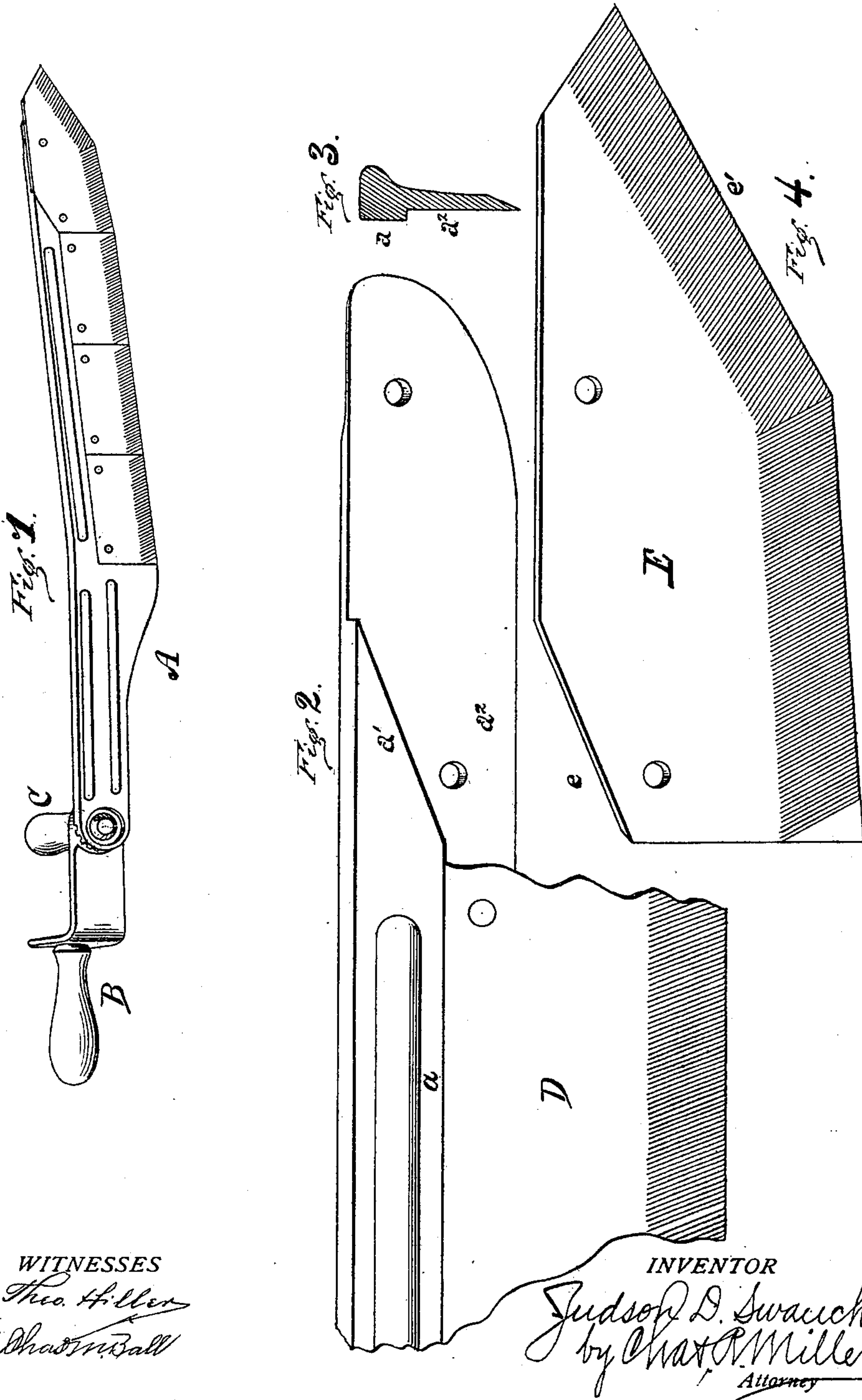
No. 632,287.

Patented Sept. 5, 1899.

J. D. SWACICK.
KNIFE FOR CUTTING HAY OR CANE.

(Application filed Feb. 20, 1899.)

(No Model.)



WITNESSES
Theo. Miller
Chas. M. Ball

INVENTOR
Judson D. Swacick
by Chas. M. Miller
Attorney

UNITED STATES PATENT OFFICE.

JUDSON D. SWACICK, OF CANTON, OHIO, ASSIGNOR TO THE NEY MANUFACTURING COMPANY, OF SAME PLACE.

KNIFE FOR CUTTING HAY OR CANE.

SPECIFICATION forming part of Letters Patent No. 632,287, dated September 5, 1899.

Application filed February 20, 1899. Serial No. 706,108. (No model.)

To all whom it may concern:

Be it known that I, JUDSON D. SWACICK, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented new and useful Improvements in Knives for Cutting Hay or Cane, of which the following is a specification.

My invention relates to improvements in knives for cutting hay or cane; and it consists of certain novel features of construction and in forming the shank in such a manner as to provide a seat for the sections forming the knife-blade, thus reducing the thickness of the knife and at the same time providing a shoulder or flange against which the sections abut, the shoulder terminating short of the end of the shank at an angle corresponding to the angle of the last section, thus providing a back for the point-section in a line with the line of resistance, preventing the breaking of the shank at the end and reducing the knife to a minimum thickness at the point, as will be hereinafter more fully described and claimed.

In the accompanying drawings similar letters of reference refer to similar parts.

Figure 1 is a perspective view of the knife. Fig. 2 is an enlarged perspective view of the end or point of the shank. Fig. 3 is a cross-sectional view of the shank, showing the projecting flange and the seat for the knife-sections. Fig. 4 is an enlarged perspective view of the end or point section.

A is the shank, to which may be attached in any desired manner the handles B and C. I have shown these handles provided with radial ribs at their point of contact with the shank to engage with corresponding radial ribs; but any desired form of engagement may be used. The shank A consists of a piece of forged or cast metal, upon which there is formed at its upper edge a projecting flange or shoulder a , terminating short of the outer end in a projecting angular flange a' upon a line parallel to the outer cutting edge of the point-section. The extent of the projection of the flange a is equal to the thickness of the knife-section, and thus forms a plane a'' , to which are riveted the knife-sections.

The cutting edge of the knife is formed of a required number of sections D, having formed thereon proper cutting edges, and a

point-section E, having upon its upper and inner edge a beveled section e and a corresponding and parallel beveled edge E' upon its outer cutting edge which forms the point. These sections are riveted to the shank by means of rivets projecting through holes in the shank at any desired point, and the projecting flange heretofore described forms a back or point of resistance in line with the cutting edge.

Heretofore in knives of this character the blades have been formed of a single section, either riveted to a flat shank, thus increasing the thickness of the knife and bringing all the resistance upon the rivets by which the blade was attached to the shank, or the shank has not extended the entire length of the knife, and the knife has been fastened to the end of the shank near the handles, or when the knife has been made of sections they have been riveted to the flat surface of the shank, and the result has been in each instance that the entire resistance has been against the rivets, which has had a tendency to weaken the shank, which frequently broke, destroying the entire utility of the knife. My device overcomes all these difficulties, and by means of the new and novel construction and arrangement of the projecting flange upon the shank and the termination thereof in the beveled flange corresponding to the beveled cutting edge at the point-section I provide an additional safeguard against the line of resistance and prevent either the working loose of the rivets or the breaking of the shank.

In operation and in the contact of the knife with the hay the projecting flange forms a back for the protection of the knife-sections and a line of resistance corresponding to the cutting edge and relieves the pressure upon the rivets and prevents them from either working loose or the breaking of the shank.

Having thus fully described my invention, what I desire to claim and secure by Letters Patent is—

1. The combination in a knife for cutting hay or cane, of a shank provided with a projecting flange terminating in an acute angle short of the end of the shank, knife-sections riveted to the shank and abutting the flange, substantially as described and for the purpose set forth.

2. The combination in a knife for cutting
hay or cane, of a shank provided with a pro-
jecting flange terminating in an acute angle
short of the end of the shank, and in line with
5 the cutting edge of the knife-sections, knife-
sections riveted to the shank and abutting
against the flange, substantially as described
and for the purpose set forth.

3. A shank for knives for cutting hay or
10 cane, provided with a projecting flange in line
with and parallel to the cutting edges of the

knife-blades to be attached thereto, and ter-
minating in an acute angle short of the end
of the shank, substantially as described and
for the purpose set forth.

In testimony whereof I have hereunto set
my hand in the presence of two subscribing
witnesses.

JUDSON D. SWACICK.

Witnesses:

CHAS. R. MILLER,

CHAS. M. BALL.