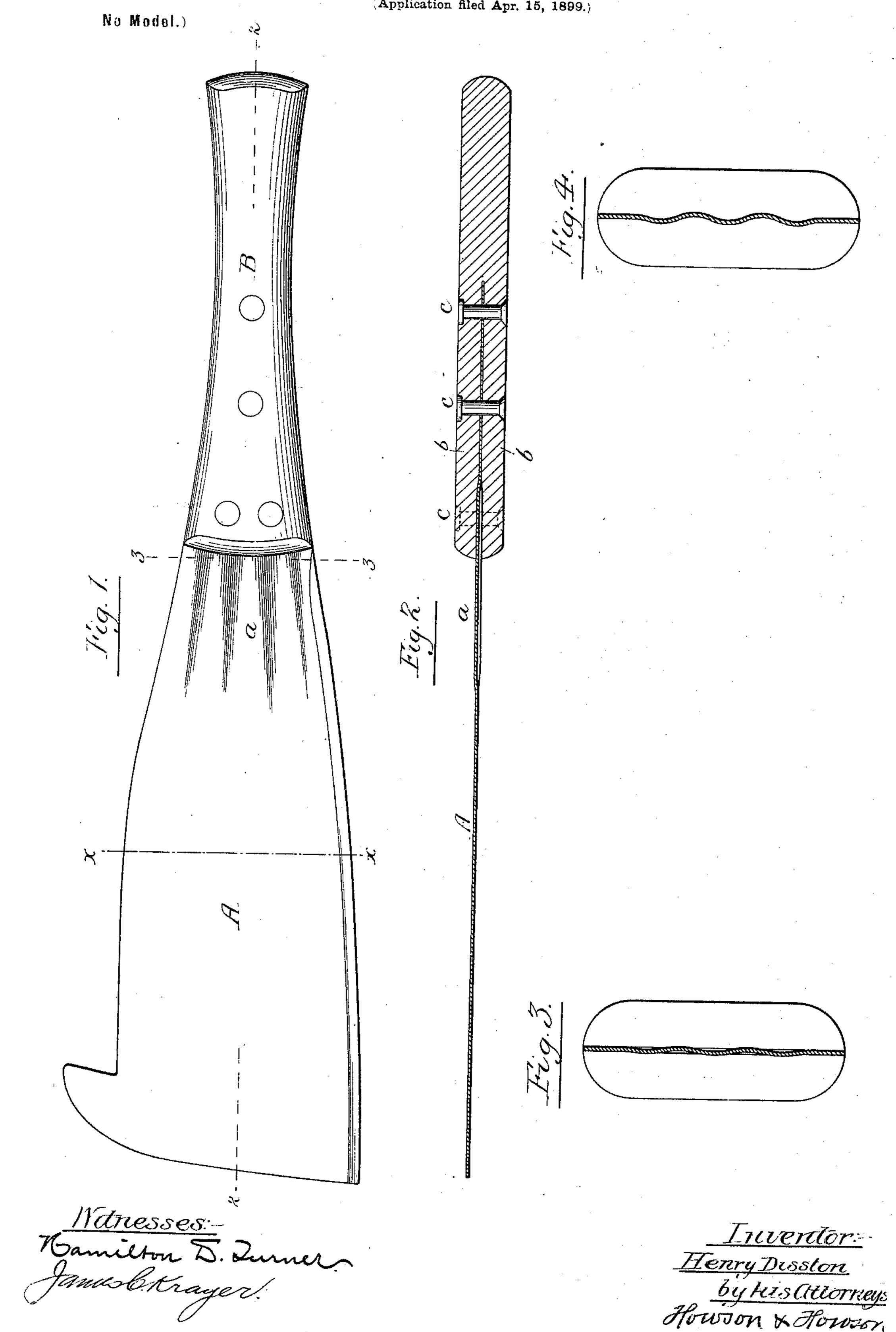
## H. DISSTON. CANE KNIFE.

(Application filed Apr. 15, 1899.)



## UNITED STATES PATENT OFFICE.

HENRY DISSTON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE HENRY DISSTON & SONS, INCORPORATED, OF SAME PLACE.

## CANE-KNIFE.

SPECIFICATION forming part of Letters Patent No. 628,775, dated July 11, 1899.

Application filed April 15, 1899. Serial No. 713,167. (No model.)

To all whom it may concern:

Be it known that I, HENRY DISSTON, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Cane-Knives, of which the following is a specification.

The object of my invention is to make a light and substantial cane-knife. This object I attain in the following manner, reference being had to the accompanying draw-

ings, in which—

Figure 1 is a side view of a cane-knife illustrating my invention. Fig. 2 is a sectional view on the line 2 2, Fig. 1. Fig. 3 is a sectional tional view on the line 3 3, Fig. 1; and Fig. 4 is a view of a modification.

It will be understood that while my invention is shown as applied to the blade of a cane-knife it can be applied to the blade of a corn-knife or to any blade which is required to be light and strong at the point where it

joins the handle.

The light cane-knives as now made are necessarily weak at the point where the blade enters the handle, and if in using the knife the blade is bent the bend takes place directly at the handle and is not distributed throughout the blade. Consequently the constant bending of the blade will in a short time break the blade off at the handle, making the knife useless, and if the blade is made heavy enough for this purpose it is too heavy to be handled by women and children.

I overcome the difficulty by making a cane-35 knife in the following manner, reference being had to the drawings, in which A is the blade, which is made of thin steel and which is reduced in width at the point where it joins the handle B. I form in the blade a series of 40 corrugations a of any depth desired at the point where the blade enters the handle. preferably extend these corrugations some distance beyond the end of the handle, as shown in Fig. 1, and preferably some distance within the handle, as shown in Fig. 2, so as to stiffen the blade at this point, but leaving the blade flat beyond the corrugations, so that in case the blade is bent it will be bent, say, about the line x x, Fig. 1, where 50 its width is increased and where there are no

sharp edges which will limit the bend—such, for instance, as the end of the handle.

I have found that a blade formed as shown can be made very light and will withstand considerable rough usage and will last as long 55 as a blade made of much heavier material.

In the present instance the handle B has two sections b b, formed by a saw-kerf, and the blade is forced between the sections and secured therein by the rivets c. The handle 60 may be made in any suitable manner, and other means of fastening the blade may be resorted to without departing from the main feature of my invention.

When the corrugations are shallow, as 65 shown in Fig. 3, the handle need not be shaped to receive the corrugations; but if the corrugations are deep, as shown in Fig. 4, I preferably corrugate the sections b b of the blade; but I find in practice that a very shal-70 low corrugation will stiffen the blade so that it will be equal to a blade made of much thicker metal.

I claim as my invention—

1. As a new article of manufacture, a knife-75 blade having a flat body portion and having a series of short longitudinal corrugations at the point where it is united to a handle, substantially as described.

2. The combination in a knife, of a flat 80 blade, a handle secured to the blade, said blade having a series of corrugations extending beyond the handle and extending within the handle, substantially as and for the pur-

pose set forth.

3. The combination in a cane-knife, of a flat blade of an even thickness throughout and reduced in width at the point where it joins the handle, a handle secured to the blade, said blade having a series of corruga- 90 tions extending beyond the end of the handle and extending within the handle, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of 95

two subscribing witnesses.

HENRY DISSTON.

Witnesses:
WILL. A. BARR,
JOS. H. KLEIN.