

(No Model.)

W. F. HANSE.
NIPPERS.

No. 556,053.

Patented Mar. 10, 1896.

Fig. 1

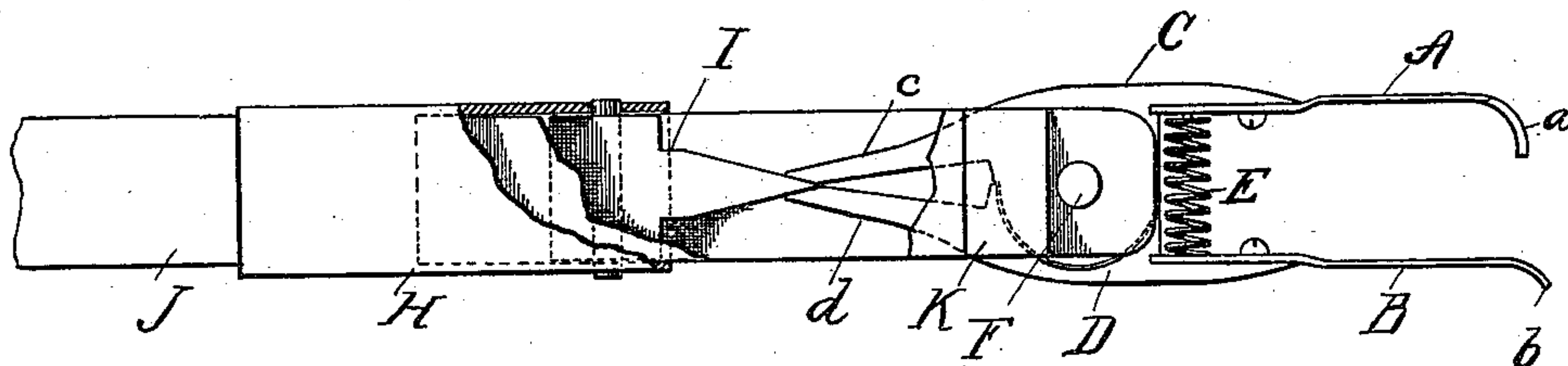


Fig. 2

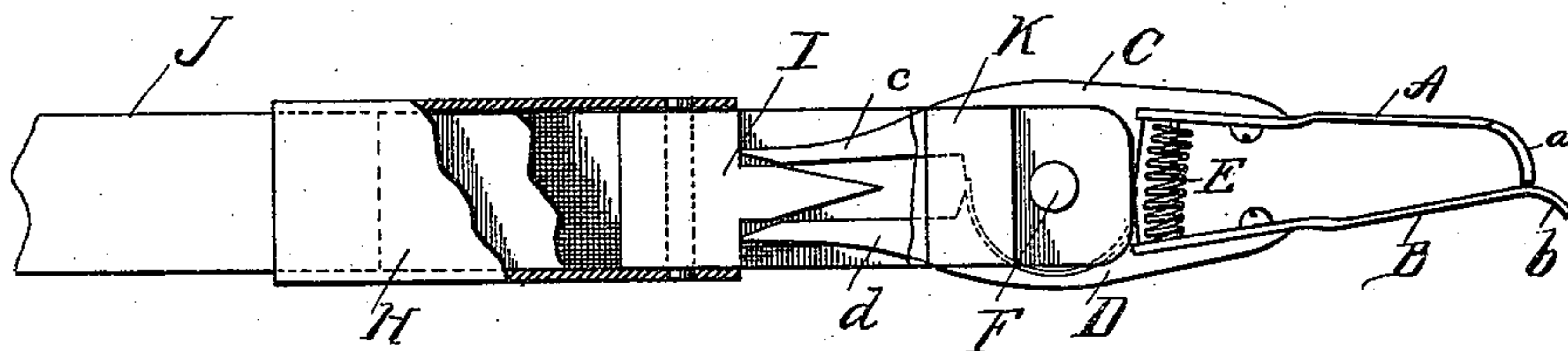


Fig. 3

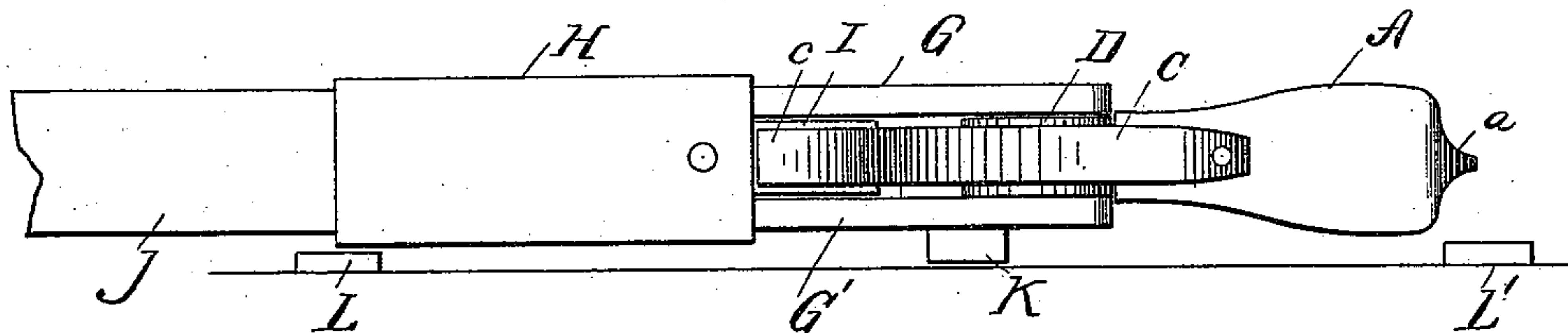


Fig. 4

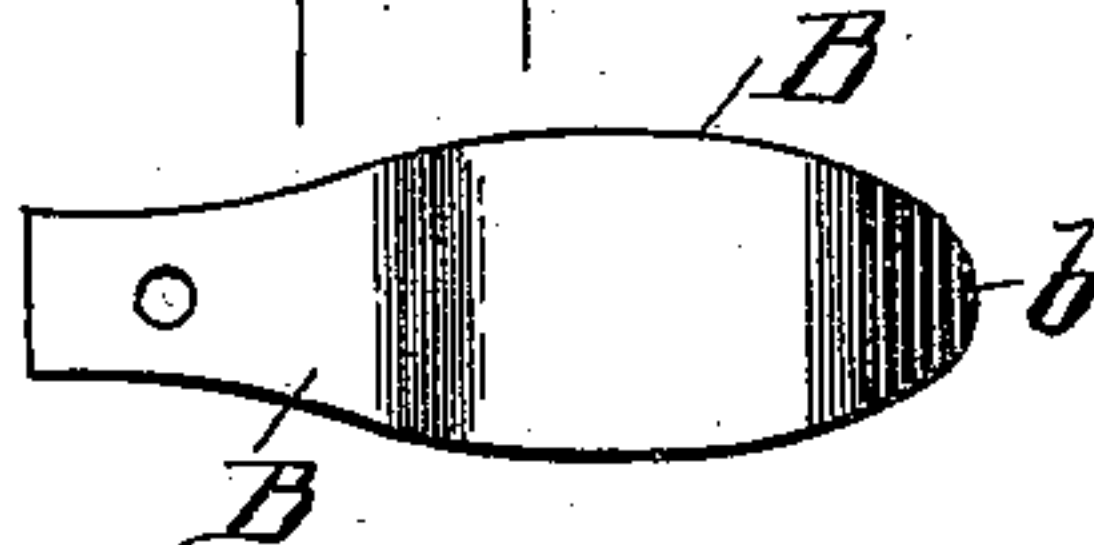


Fig. 5



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SPECIFICATION forming part of Letters Patent No. 556,053, dated March 10, 1896.

Application filed April 20, 1895. Serial No. 546,471. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. HANSE, a resident of the city of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Nippers, of which the following is a specification.

My invention relates to nippers, and has for its object to produce nippers which may be used for picking up small articles.

My invention has particular reference to nippers for selecting and withdrawing a hair from a bunch of hairs in order that the hair may be woven into a fabric to form haircloth; but it will be readily understood that my invention is applicable to a great variety of uses.

To this end my invention consists in the construction hereinafter set forth and claimed.

My invention will be understood by reference to the accompanying drawings, in which—

Figure 1 shows a side view, partly broken away, of a nipper constructed according to my invention, showing the jaws thereof in their open position. Fig. 2 is a similar view showing the jaws in their closed position. Fig. 3 is a plan view of the nipper, showing the pointed jaw, the other jaw being omitted for the purpose of clearer illustration. Fig. 4 is a detail plan view of the jaw constituting the "table," so called; and Fig. 5 is a detail end view of the point of the pointed jaw.

In the drawings, A B are nipper-jaws which are preferably carried upon suitable pivoted bars C D and are normally held apart by a spring E. The pivoted members are held together by a pivot F, upon which they turn, and are provided each with a tailpiece c d, which tailpieces extend into proximity to each other and are normally maintained in such proximity by the spring E. The carrying-pivot F is seated in the bars G G', which constitute a sliding frame. These bars move in a casing H, which is secured to and moves with a suitable movable nipper-rod J, and in this casing H is carried a wedge I, which is adapted to separate the tailpieces c d in order to bring the jaws together, as will be hereinafter more fully described.

The jaw B, as aforesaid, is of considerably greater extent than the point of the upper

jaw and constitutes a table with its end b bent away from the plane of the main or body portion thereof.

The jaw A is provided with a point a, which point is provided with a notch, as at a', which extends in the direction in which the hair is received upon the table. This notch is in the present case just large enough to receive a single hair in order that but one hair may be withdrawn from the bunch at a time. A side bar of the nipper, as G', is provided with an abutment K, which is adapted to co-operate with abutments L L' upon some stationary portion of the loom to effect the opening and closing of the jaws.

In order that my invention may be thoroughly understood, I will describe its operation when applied to a haircloth-loom. When thus used, the nipper is carried by the nipper-rod, which is operated from the loom mechanism, into the bunch of hair, which bunch preferably consists of a number of hairs held at or near their ends in a clamp. When the nipper has been entered among the hairs, the jaws are closed together by the abutment K striking the abutment L' and sliding the frame G G' into the casing H and forcing the tailpieces c d over the faces of the wedge I, which separates said tailpieces and thereby brings the jaws of the nipper together. As the jaws come together, the jaw B will constitute a table upon which the ends of the hairs will be spread out, the point a of the jaw A forcing its way between the hairs until finally it rests upon a single hair upon the table, which hair is entered into the notch a', and the said hair is firmly held between the jaws. The nipper may now be withdrawn from the bunch, carrying with it the hair which it has selected and weaving the said hair into the fabric in a manner which is well understood. When the hair has been drawn into the fabric, the abutment K strikes the abutment L, which striking has the effect of withdrawing the sliding frame from the casing H and sliding the tailpieces c d over the faces of the wedge I to the point thereof, the spring E serving to separate the jaws to release the hair.

It will be quite obvious that the form of my device may be varied without departing from the spirit of my invention, so therefore I do

not limit myself to the precise construction and arrangement of the device as herein shown; but

What I claim, and desire to secure by Letters Patent, is—

1. In a nipper, the combination of a nipper-rod, a casing secured to and traveling therewith, pivoted members C D adapted to slide within said casing, the said pivoted members
10 being provided with nipper-jaws and with tailpieces *c d*, springs exerting a pressure to open said nipper-jaws and a wedge carried by said casing and adapted for entry between the said tailpieces to separate the same to close
15 the jaws and means for moving the casing with relation to the nipper-jaws, substantially as described.

2. In a loom, the combination of a nipper-rod, a casing secured to and traveling there-

with, a frame G G' adapted to slide within
said casing and provided with a lug K, mem-
bers C D pivoted to the frame G G', said mem-
bers being provided with nipper-jaws and
tailpieces *c d*, springs exerting a pressure to
open said nipper-jaws, a wedge carried by
said casing and adapted to enter between the
tailpieces and separate the same to close the
jaws and stationary abutments in the path of
travel of lug K, whereby the jaws are opened
by the contact of the lug K with one abut-
ment and are closed by contact of the lug
with the other abutment, substantially as de-
scribed.

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Witnesses:

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