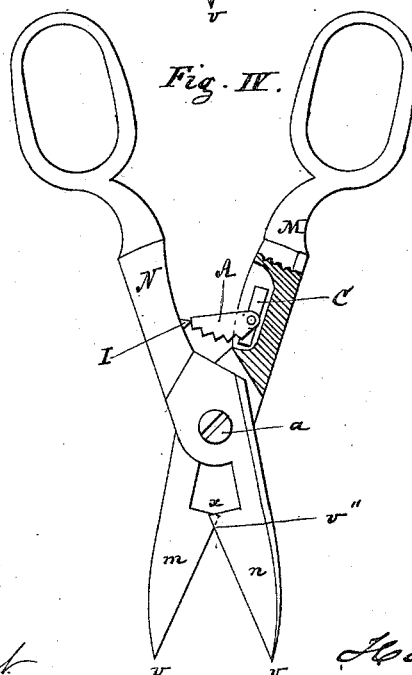
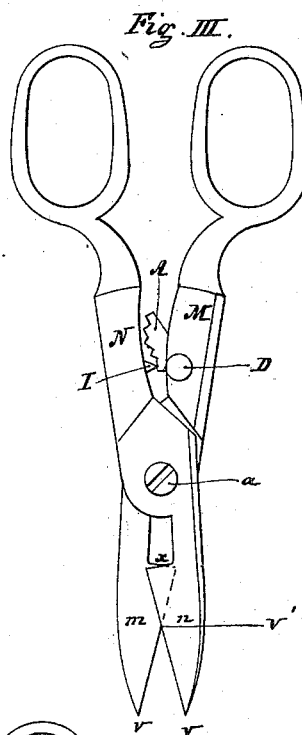
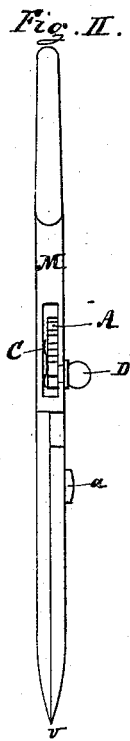
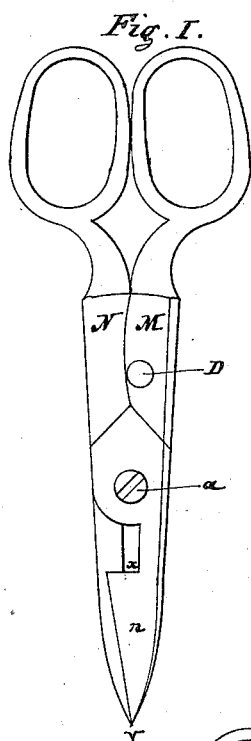


(No Model.)

H. THEIS.
SCISSORS AND SHEARS.

No. 301,305.

Patented July 1, 1884.



Witnesses.
G. Carniquet
W. E. Maginn

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UNITED STATES PATENT OFFICE.

HUGO THEIS, OF SOLINGEN, PRUSSIA, GERMANY.

SCISSORS AND SHEARS.

SPECIFICATION forming part of Letters Patent No. 301,305, dated July 1, 1884.

Application filed December 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, HUGO THEIS, a citizen of Germany, and a resident of the town of Solingen, Prussia, in the Empire of Germany, have invented a new and useful Improvement in Scissors, of which the following is a specification.

The nature of my invention consists of the arrangement of a serrated cam or lever on one leg of the scissors and a projecting point on the other leg, which, according to the position of the serrated cam, regulates the closing of the scissors, and consequently the amount or length of the cut to be produced.

In the accompanying drawings, Figure 1 is a front view, and Fig. 2 an inside view, of the leg M of the scissors embodying my invention. Fig. 3 is a front view of scissors, showing the position of the serrated cam to cut a certain length; and Fig. 4 shows the same fixed for a different length of cut, partly in section.

Similar letters represent similar parts in all the figures.

M N are the legs of the scissors, turning on the pin *a*, and arranged with their cutting ends *m n* similar to scissors for cutting button-holes. In one of the legs, M, a serrated cam or lever, A, is fixed to a center pin provided with a knob, D, through which said cam A can easily be turned into any desired position. Below this serrated cam a spring, C, is arranged to hold this serrated cam A in any position the same may be moved, on account of its friction, during the operation of cutting. On the other leg, N, nearly opposite the turning-point of the cam A, a projecting point, I, is attached. When the cam A is turned so as to lie within the body of the leg M, a hole equal to the whole length of the cutting parts of scissors from *x* to *v* (see Fig. 1) can be cut. When the cam A is turned so that the projection I comes in-

to one of the serrated parts or teeth of the cam A, by the closing of the legs M and N, the length of the hole that will be cut will only be the distance from *x* to *v'*, (see Fig. 3,) and when said cam A is turned so that the projection I will come in contact with the end of the cam A the shortest hole in length corresponding from *x* to *v''*, Fig. 4. It will be seen that the length of the hole or cut will therefore depend upon the position of cam A and the serrated part or tooth against which the projection I will come in contact when the legs of the scissors are closed. These serrated parts or teeth may be numbered for the purpose of facilitating the position of the cam A according to the desired length of the hole to be cut; or the length corresponding with each tooth can be marked upon the cam A. Instead of arranging this serrated cam A in the body of the leg M, as here shown, the same may be arranged upon its face, and the point or projection I in that case upon the surface of the leg N in a line with the cam A; but I prefer to place the same into the body of one of the legs, to have as little as possible projection on the outside of the scissors.

The knob D may be dispensed with and the cam A moved in the desired position by the end of the finger.

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

In scissors having cutting-edges *m n* similar to button-hole scissors, the combination of a serrated cam, A, with friction-spring C in one of the legs and a projection, I, on the other leg of the scissors, substantially in the manner and for the purpose herein described.

HUGO THEIS.

Witnesses:

CARL JOHANN KAUFMANN,
HANS FRIEDRICH.