

(No Model.)

T. G. HALL
CUTTING PLIERS.

No. 294,034.

Patented Feb. 26, 1884.

Fig. 1.

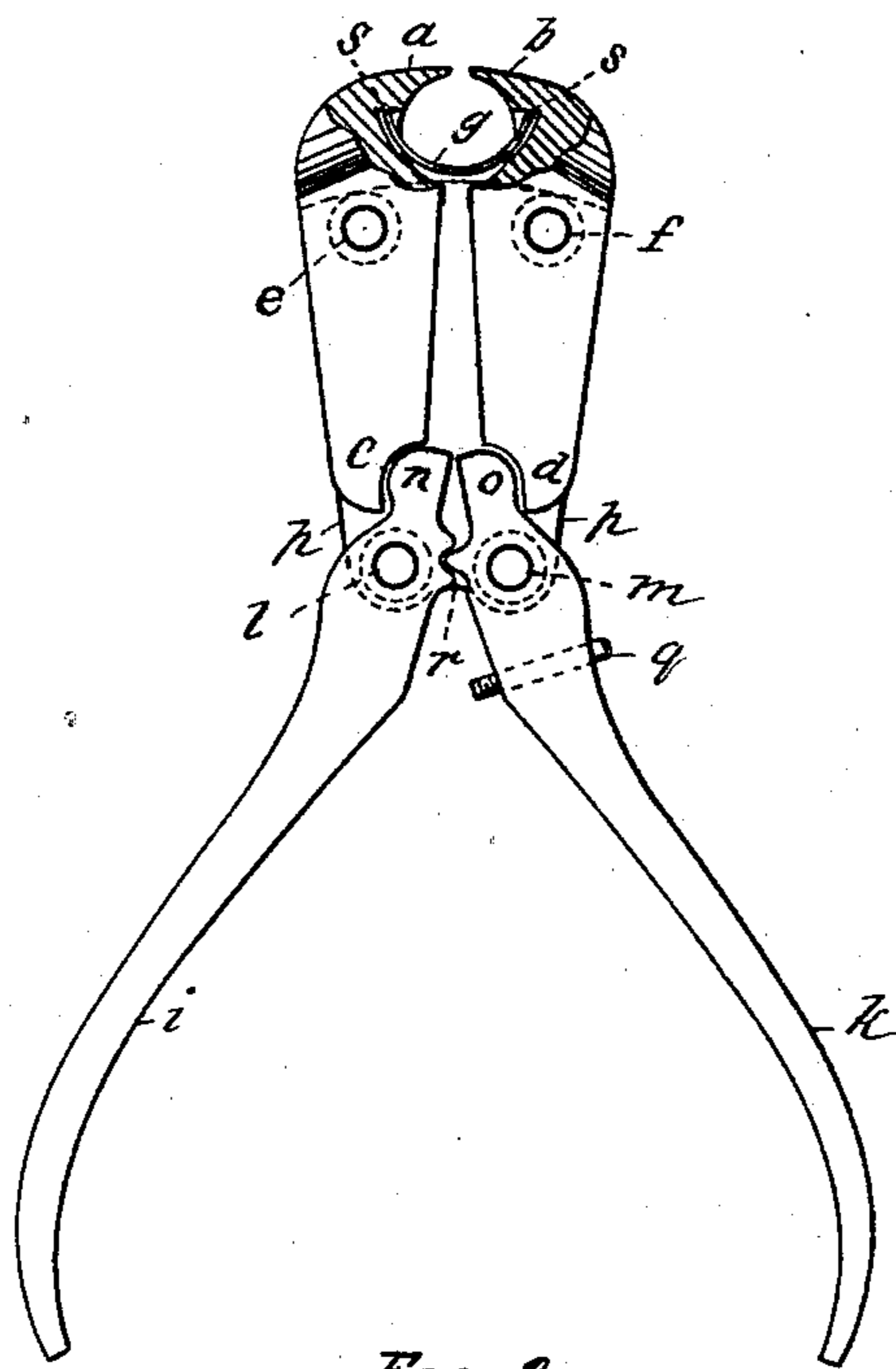
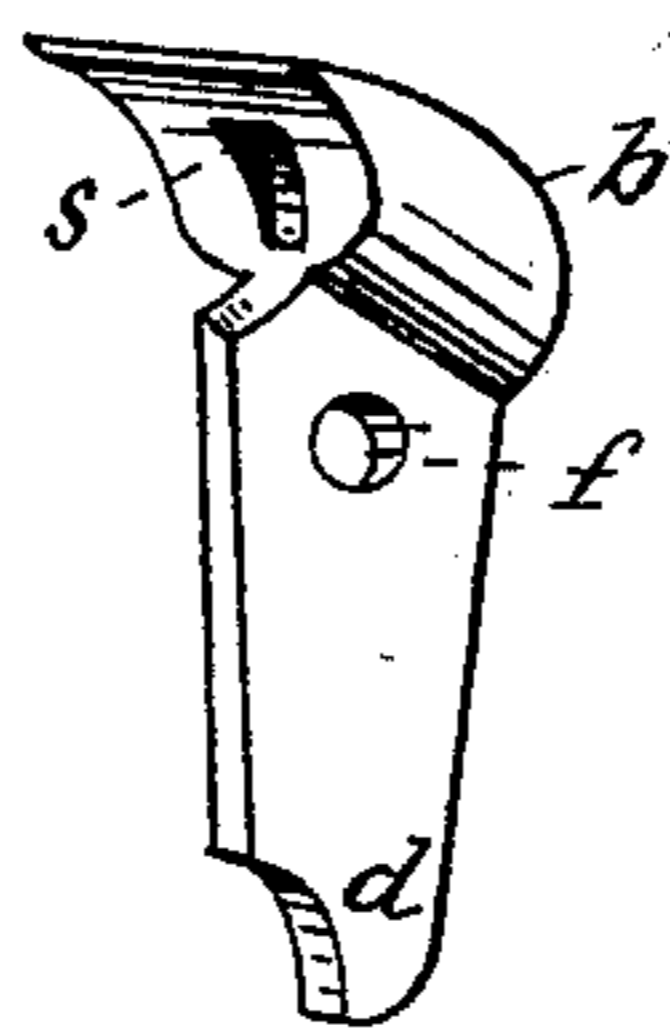


Fig. 2.



WITNESSES:

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THOMAS G. HALL, OF BROOKLYN, NEW YORK.

CUTTING-PLIERS.

SPECIFICATION forming part of Letters Patent No. 294,034, dated February 26, 1884.

Application filed July 25, 1883. (No model.)

To all whom it may concern:

Be it known that I, THOMAS G. HALL, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Cutting-Pliers, of which the following is a specification in such full, clear, exact, and concise terms as will enable any one skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, making part of this specification, and to the letters and figures marked thereon.

Figure 1 is a side elevation of my improved pliers with one of the side plates removed, and Fig. 2 is a perspective of one of the nipper-jaws.

My invention consists of making a cutting pliers or nippers with a novel combination of parts, and is an improvement upon certain inventions heretofore made by me, one being secured by Letters Patent of the United States granted to me November 5, 1878, and reissued February 7, 1882, and numbered 10,028 of reissued patents, and the other forming the subject-matter of an application for a patent made by me and now pending in the United States Patent Office.

In the drawings, the nipper-jaws are designated by the letters *a b*, the tails of the jaws by *c d*, the fulera of the jaw-levers by *e f*, the spring that opens the jaws by *g*, the long ends of the handle-levers by *i k*, the short ends by *n o*, the fulera of the same by *l m*, the indentations on the under side of the jaws which form the spring-seat by *s*, the adjustable stop-screw that keeps the jaws from slamming together by *q*, and the gearing between the handles opposite the handle-fulera by *r*.

All the aforesaid parts and combination of parts are old, excepting the C-spring *g* and the position which the said spring occupies with reference to the other parts of the tool. The other devices that are illustrated in the drawings hereto annexed, but not covered by my original or reissued patent aforesaid, (viz., the cog-gearing *r* between the handles and the adjustable stop-screw *q*,) are included in the subject-matter of the application for a patent heretofore referred to.

The novel features of my improved nipper

consist, therefore, in placing a C-spring above the fulera of the jaw-levers, and seating the same in notches made on the under side of the jaws close up under the cutting-edges of the tool.

The advantages secured by my present invention are these: The C-spring, seated as described, closes and at all times protects the interior of the tool from the entrance of foreign substances, which would interfere with its efficient operation and be liable to break the V-shaped spring placed opposite the fulera of the jaw-levers heretofore employed in my pliers. The C-spring, having its bearings much farther above the fulera *e f* than the said V-shaped spring, has greater efficiency and imparts more activity to the movements of the several parts of the tool; and, furthermore, the C-spring forms a yielding stop, against which the metal inserted between the jaws impinges, so that when the jaws close to cut the metal the spring retreats from contact with the same, and avoids the tendency to chip out the edges of the cutting-blades, which is necessarily produced by an unyielding stop in the operation of cutting. This spring may be placed in position without removing the side plates of the nipper by withdrawing the screws forming the fulera *l m* and removing the handle-levers, when the tails of the jaw-levers *c d* will fall together and open the jaws wide enough to allow the spring to be removed or placed in its seat, as will be readily understood.

As the other elements of my improved nippers have been fully described in the Letters Patent and application for the same aforesaid, I do not deem it necessary to enter into a detailed description of the same.

Having thus described my invention, I claim—

A cutting pliers or nippers consisting of a pair of jaw-levers, *a b c d*, handle-levers *i k n o*, connected by gearing *r*, the independent fulera *e f l m*, C-spring *g*, seated in notches cut in the under side of the jaws, side plates, *p p*, and a stop, *q*, substantially as described.

THOMAS G. HALL.

Witnesses:

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