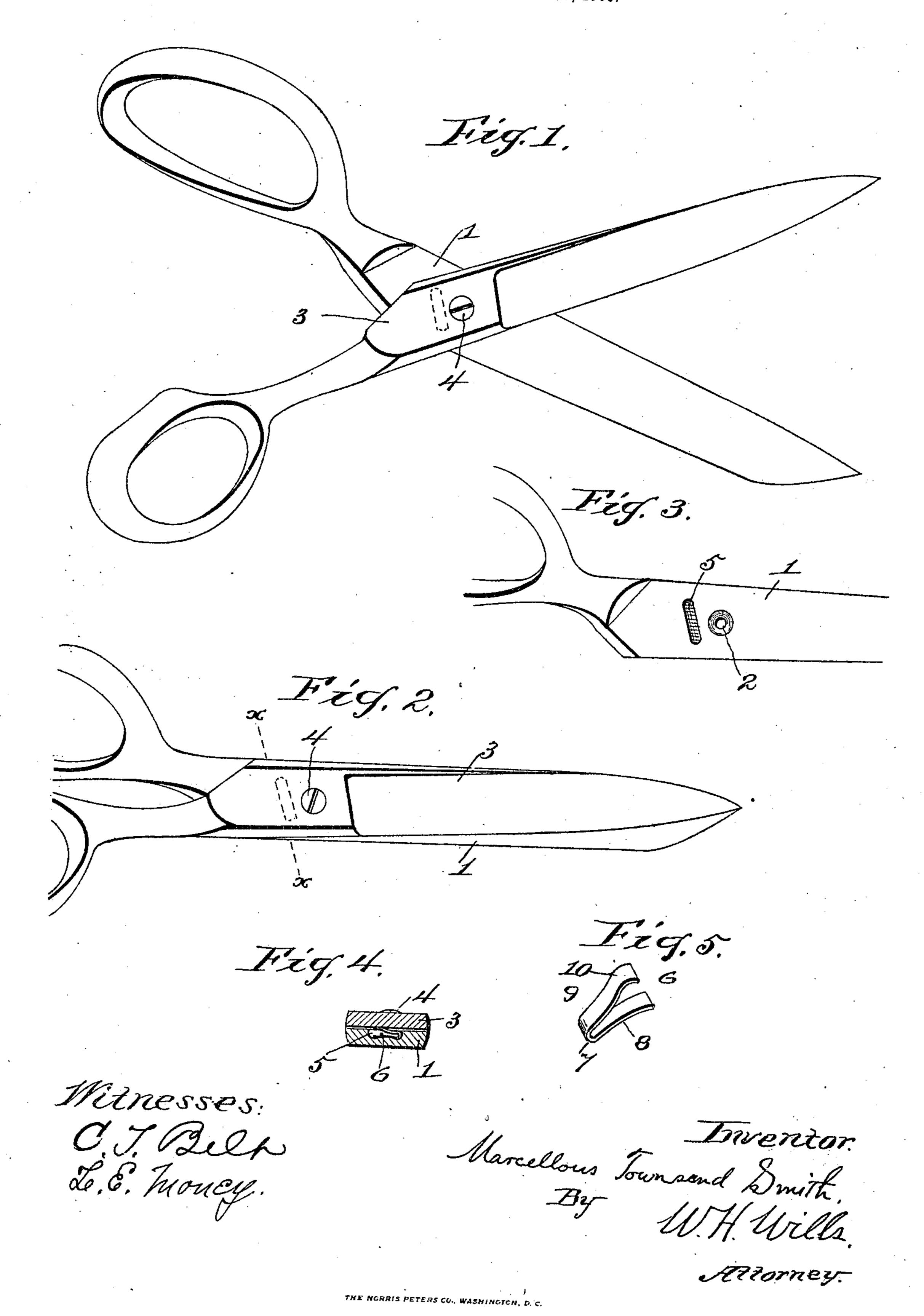
## M. T. SMITH. SCISSORS.

APPLICATION FILED JUNE 25, 1906.



## UNITED STATES PATENT OFFICE.

MARCELLOUS TOWNSAND SMITH, OF NORTHPORT, NEW YORK.

## SCISSORS.

No.837,590.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed June 25, 1906. Serial No. 323,326.

To all whom it may concern:

Be it known that I, Marcellous Townsand Smith, a citizen of the United States, residing at Northport, in the county of Suffolk and State of New York, have invented certain new and useful Improvements in Scissors, of which the following is a specification.

This invention relates to scissors and shears, and particularly to means for effecting a cushion or spring bearing between the blades of scissors, shears, and similar cutting

implements.

The object of the invention is to provide a spring interposed between the blades of scissors and shears in such position as to throw the cutting edge of the blades against each other throughout their length during the working of the blades and to take up lost motion or looseness at the pivot-joint, whereby the usual adjustment of the joint and frequent grinding of the blades is obviated.

other improved results by housing a spring in one of the scissors-blades at the rear of or behind the pivot-screw, so that the spring may have an equal bearing on each blade and incline the latter so that their edges have a shearing contact during the working of the

30 scissors.

It is a well-known practice with tailors and other users of scissors to overcome the looseness or lost motion at the pivot by hand-pressure in opposite directions on the blades during the working of the scissors. This has a tendency to throw the cutting edges of the blades one against the other to a certain extent. It is also well known that great difficulty is experienced in adjusting the pivot-stud so that the blades may be made to cut throughout their length and yet have said stud loose enough to permit working of the scissors comfortably without lost motion.

Therefore it is the purpose of this invention to overcome the above-mentioned and other disadvantages and to furnish scissors and shears having a pivot-stud controlled in connecting the blades by a spring of special form carried by one of the blades and concealed by the blades, whereby the blades are

sharpened in working them.

In the accompanying drawings, forming part of this application, Figure 1 is an elevation of a pair of scissors in open position.

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Fig. 2 is a similar view showing the scissors

closed. Fig. 3 is an elevation of part of the spring-carrying blade. Fig. 4 is a sectional view on the line xx, Fig. 2. Fig. 5 is a detail perspective view of the spring.

The same reference-numerals denote the 60 same parts throughout the several views of

the drawings.

The invention is applicable to any ordinary form of scissors or shears by simply making a cavity in the inner face of one of the blades, 65 preferably the blade 1, having a screw-aperture 2, the other blade 3 having the usual countersunk aperture for the screw or pivotstud 4. The cavity 5 is made as close to the aperture 2 as possible and at an angle to the 7° edges of the blade. The cavity is of a depth equal to the thickness of the spring 6, when the latter is compressed, and said cavity is only of sufficient length and width to hold the spring. The spring is preferably com- 75 posed of a short length of sheet-steel folded upon itself at 7 to form a curved bottom arm 8, adapted to rest on the bottom of the cavity, and a top arm 9, having a compound curve forming a bearing 10 for the blade 3. 80 The said bearing is placed in the cavity nearest the cutting edge of the blade 1, and when the pivot-stud is screwed into desired position the spring will tilt or incline the blades slightly, or sufficient to produce uniform con- 85 tact of the cutting edges of the blades throughout their length.

It will be observed that the spring-pressure may be varied as desired by a slight adjustment of the stud, that a loose stud is held 90 in place by pressure of the spring on the blades, and that the spring is wholly concealed by the blades, so that it cannot be caught by or interfere with the material during cutting thereof, and that the blades 95 sharpen themselves during their working.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is-

1. The combination, with a pair of scissors, shears or similar implement, one of the blades thereof having a cavity in its inner face adjacent its pivot-opening, of a plate-spring having an arm fitting the cavity and an arm bearing on the inner face of the companion blade.

2. The combination, with a pair of scissors, shears or similar implement, one of the blades thereof having a cavity in its inner face adjacent its pivot-opening, of a plate-spring car- 110

ried by the cavity and having a bearing-arm terminating adjacent the cutting edge of this blade and engaging the inner face of a companion blade.

3. The combination, with a pair of scissors the inner face of one of its blades having a cavity, of a V-shaped plate-spring having a curved arm seated in the cavity and a com-

pound curved arm forming a bearing for the other blade.

In witness whereof I hereunto set my hand in the presence of two witnesses.

MARCELLOUS TOWNSAND SMITH.

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Witnesses:

HOWARD K. SOPER, DAVID G. BRYANT.