

No. 715,708.

Patented Dec. 9, 1902.

R. G. TITUS.
SHEARS SPRING.

(Application filed Aug. 4, 1902.)

(No Model.)

Fig. 1.

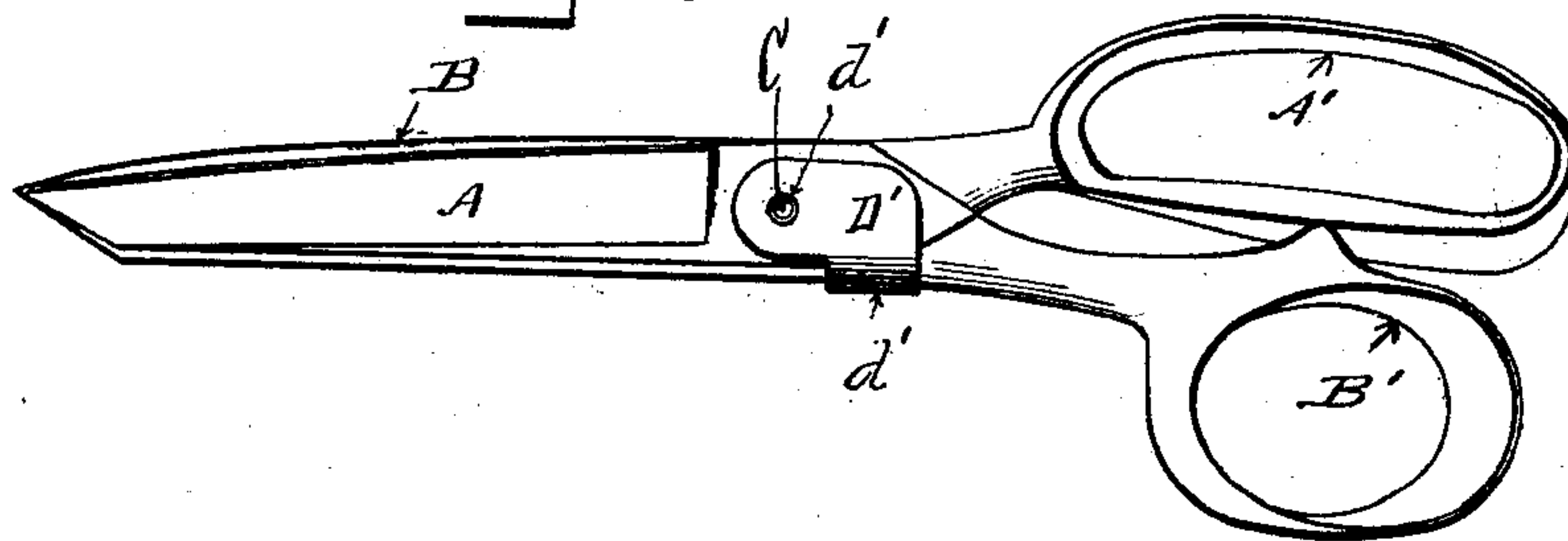


Fig. 2.

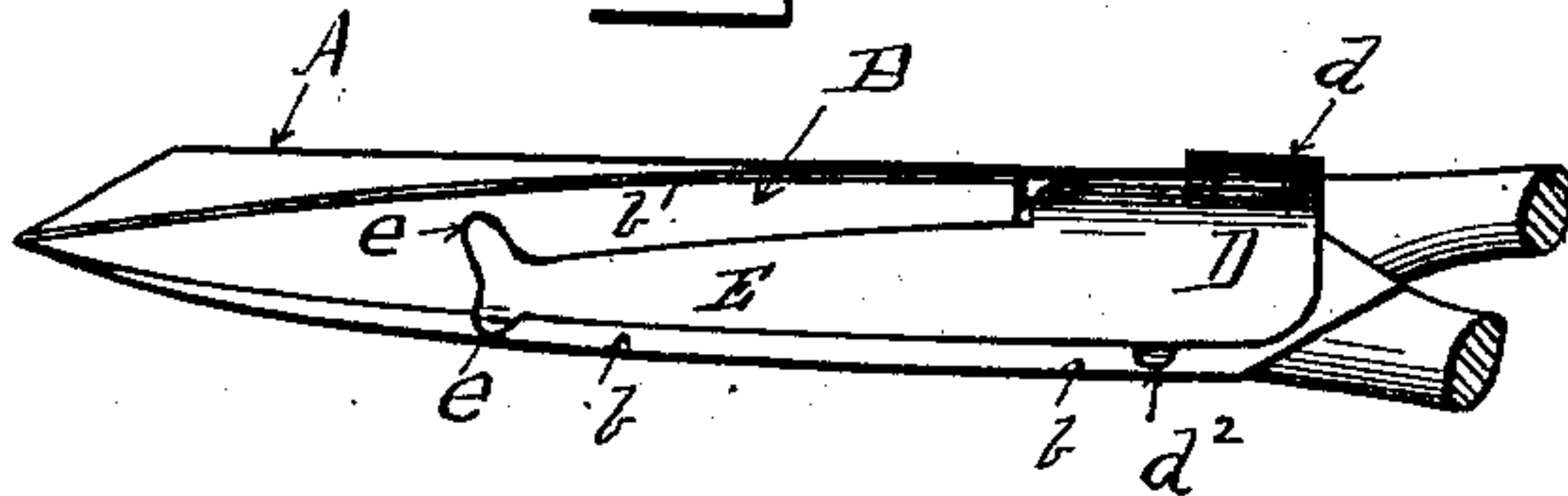


Fig. 3.

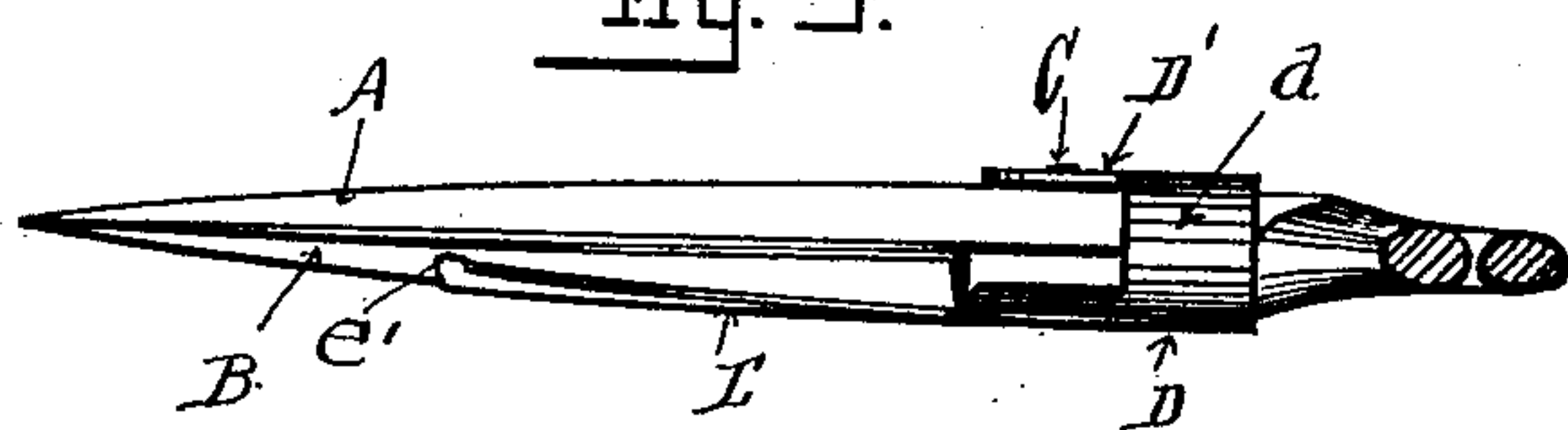
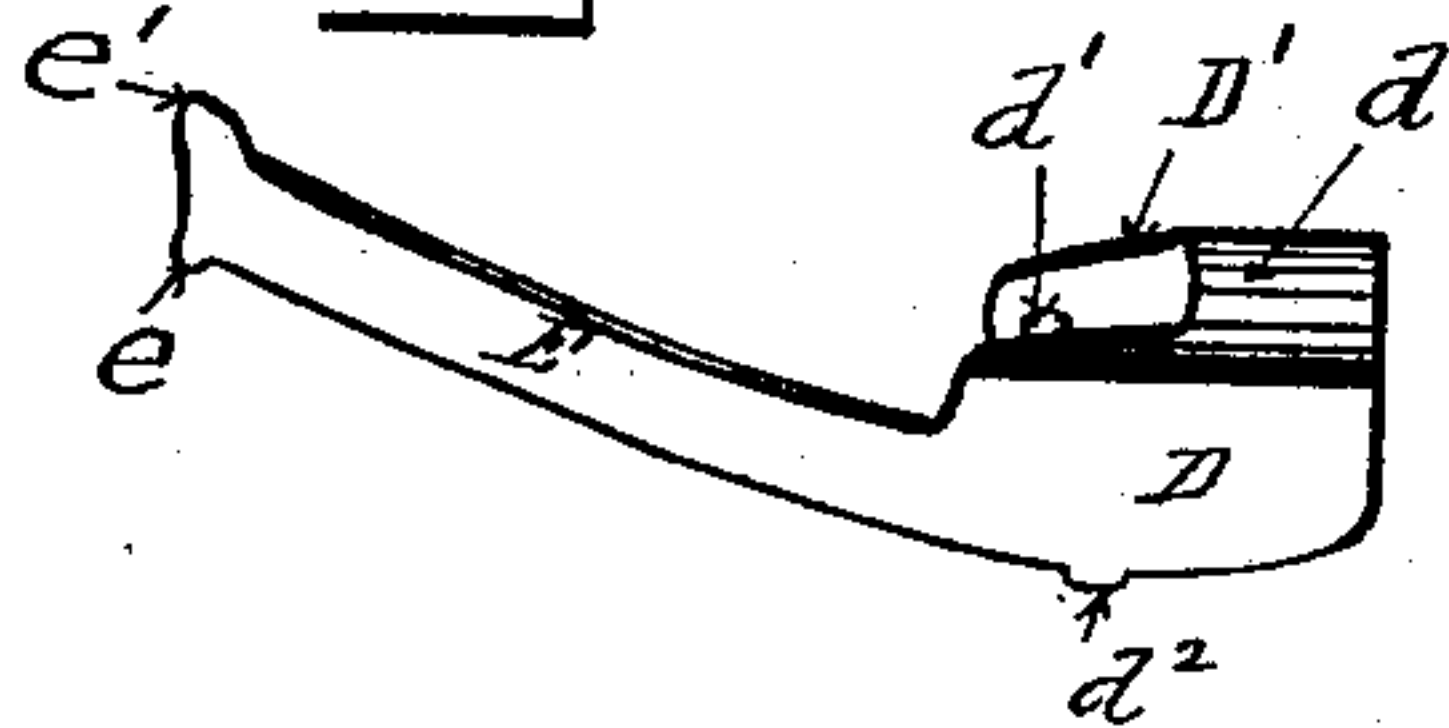


Fig. 4.



Witnesses.

Flourie Stockert
Charles A. Murtens

Inventor.

Richard G. Titus

By J. C. & H. M. Sturgeon

Attys

UNITED STATES PATENT OFFICE.

RICHARD G. TITUS, OF ERIE, PENNSYLVANIA, ASSIGNOR TO JOHN DIETZ,
OF ERIE, PENNSYLVANIA.

SHEAR-SPRING.

SPECIFICATION forming part of Letters Patent No. 715,708, dated December 9, 1902.

Application filed August 4, 1902. Serial No. 118,362. (No model.)

To all whom it may concern:

Be it known that I, RICHARD G. TITUS, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Shear-Springs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification.

My invention relates to improvements in springs for shears, and has for its object the construction of a spring which is adapted to fit upon an ordinary pair of shears and perform not only the function of keeping the pivoted joint between the shear-blades tight, but also operates thereon to retain the cutting edges of the blades in close contact.

This invention is hereinafter set forth and described, and illustrated in the accompanying drawings, in which—

Figure 1 shows a right-hand side view in elevation of a pair of shears with my improved shear-spring thereon. Fig. 2 shows a left-hand side view in elevation of the same with the handles broken away. Fig. 3 shows a top or plan view of the same. Fig. 4 shows a perspective view of my improved shear-spring detached from the shears.

In the drawings illustrating my invention, A B represent the blades of a pair of shears, A' B' the handles thereof, and C the rivet securing the shear-blades together, all of the usual construction.

My improved shear-spring is preferably made of spring-steel and is bent at the rear end so as to form spring-jaws D D', connected by a curved piece *d*, so as to embrace the pivoted joint and pivot C of the shear-blades A B. The shorter jaw D' is provided with an opening *d'*, adapted to pass over the rivet C, so that when in place upon the shears the

jaws D D' will firmly clamp the joint together and be retained in place by the projecting end of the rivet C, as clearly shown in Figs. 1, 2, and 3. Upon the under edges of the jaw D there is an inturned lip *d*², adapted to engage the bevel *b* on the back of the shear-blade B, and projecting forward from the jaw D there is a spring extension E, which extends along the jaw B and is provided on its outer end with lips *e e'*, which contact with the beveled surfaces *b b'* of the back of the shear-blade B and retain the outer end of the extension E parallel with the blade B and operate against the blade B to hold the cutting edge thereof in contact with the cutting edge of the blade A.

It will be observed that this spring can be placed upon and coöperate with any ordinary pair of shears without any change being required in the rivet or other portions of the shears and that when in place it performs not only the function of a shear-joint clamp, but of a shear-blade spring.

Having thus shown and described my invention, so as to enable others to construct and use the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination in a shear-spring, of a spring-clamp embracing the shear-joint, and an arm extending therefrom along the back of one of the shear-blades, substantially as and for the purpose set forth.

2. The combination in a shear-spring, of spring-jaws embracing the shear-joint, and a spring-arm extending from one of the jaws forward along the back of one of the shear-blades substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD G. TITUS.

Witnesses:

TRUMAN C. ANDREWS,
P. V. GIFFORD.

It is hereby certified that Letters Patent No. 715,708, granted December 9, 1902, upon the application of Richard G. Titus, of Erie, Pennsylvania, for an improvement in "Shear-Springs," was erroneously issued to John Dietz, as owner of the entire interest in said invention; that said Letters Patent should have been issued to the inventor *Richard G. Titus and John Dietz, jointly*, said John Dietz being the assignee of one-half interest only in said patent, as shown by the record of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 23d day of December, A. D., 1902.

[SEAL.]

F. I. ALLEN,
Commissioner of Patents.