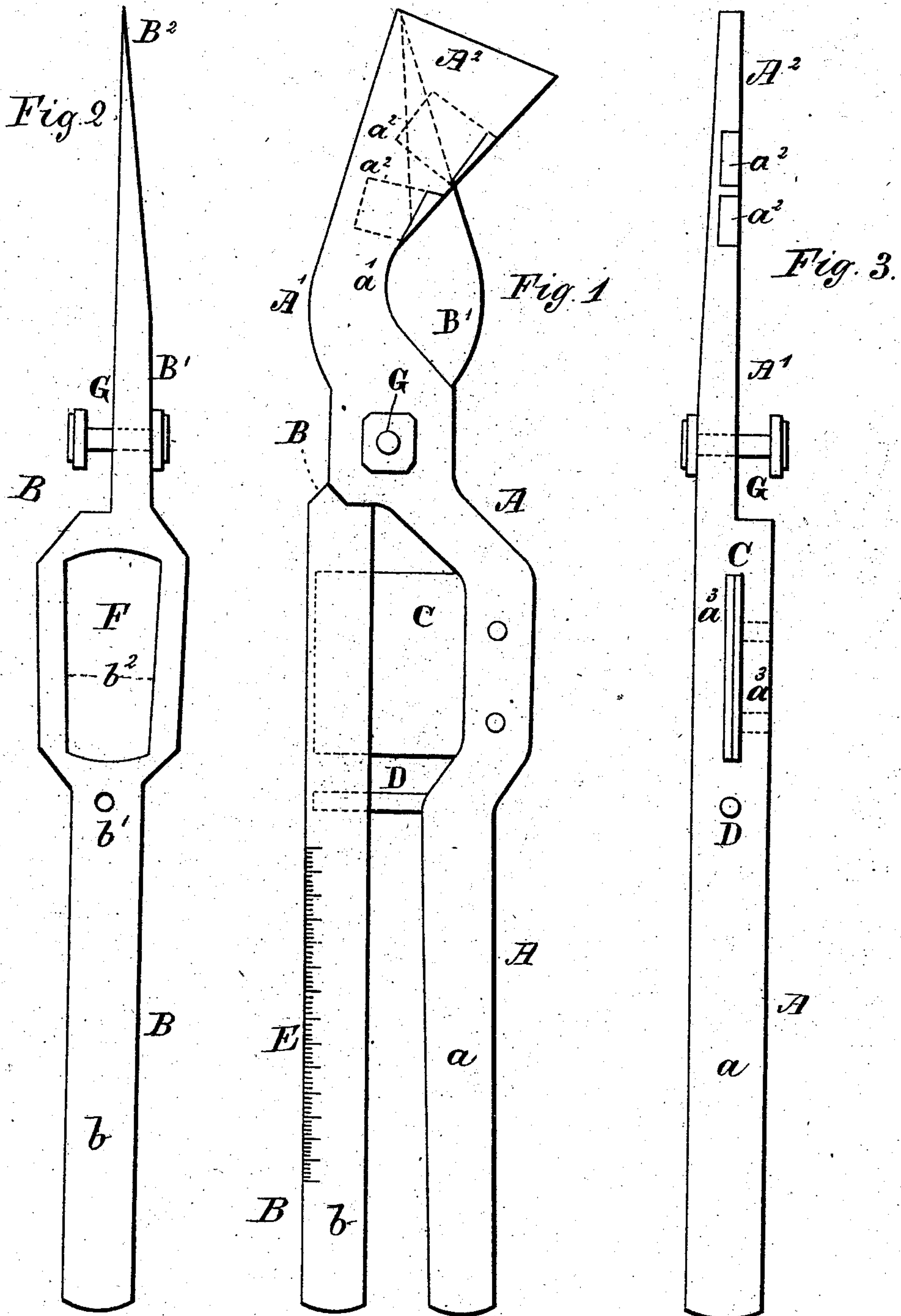


(Model.)

A. DE CAUNES.
PRUNING SHEARS.

No. 289,995.

Patented Dec. 11, 1883.



Witnesses
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UNITED STATES PATENT OFFICE.

ARMAND DE CAUNES, OF ORPILLIERES, FRANCE.

PRUNING-SHEARS.

SPECIFICATION forming part of Letters Patent No. 289,995, dated December 11, 1883.

Application filed October 6, 1882. (Model.) Patented in France April 18, 1882, No. 142,502; in Belgium August 30, 1882, No. 42,772; in Spain September 4, 1882, and in Austria September 7, 1882.

To all whom it may concern:

Be it known that I, ARMAND DE CAUNES, a citizen of the French Republic, and a resident of Orpillieres, in France, have invented certain new and useful Improvements in Grafting-Shears; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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.

My invention relates to improvements in grafting implements or shears; and it consists in the construction of the same, as hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 shows my improved grafting implement in elevation, and Figs. 2 and 3 are edge views of the two blades of the implement.

The grafting-shears consist of two sections, A and B, the section A being provided with a shank or handle, a , terminating at its upper end in a curved or hooked cutting-blade, A' , enlarged from the curved cutting-edge a' to its outer extremity, where it forms a flat cutting-blade, A^2 .

Above the curved cutting-edge a' the blade is provided with recesses a^3 , having their greatest depth at the cutting-edge, said recesses decreasing in depth toward the back of the blade, their rear edge being flush with the face of said plate. Below its pivotal axis the section A carries a rectangular cutting-blade, C, connected to the upper end of the handle part a , which at that point is bent outwardly for the purpose, and below said cutting-blade the handle carries a pin, D, that acts as a stop, for purposes presently explained.

The section B is composed of a straight handle, b , provided with a scale or measuring-indices, E, a recess, b' , for the reception of the pin D, and a slot, F, into which penetrates the cutting-blade C, as shown in Fig. 1. The section B of the implement terminates above the pivot G in a cutting-blade, enlarged at its base B' , where it is formed with a curved cutting-edge, and tapering thence to a point, as at B^2 .

The two sections are pivoted together by means of a pin, G, as shown in Fig. 1.

The operation of the improved grafting implement is as follows: The scale C serves to measure the diameter of the scion relatively to that of the stock upon which it is to be grafted, and I thus provide in a grafting implement the means to select the scion that will best fit a given diameter of stock. The curved cutting-edge a' of the section A, in connection with the curved enlarged cutting edge or portion B' of the section B, serve to sever the stock to be grafted at any desired point above the soil, and also to cut the scions—that is to say, these cutting-edges are adapted for cutting horizontally. The cutting-blade C of the section A and the slot F of the section B serve to split the stock vertically for the insertion of the scion by simply opening—that is to say, separating the handle—passing the slot over the end of the stock to be grafted, the walls b^2 of which will serve as guides for the end of the stock and hold it in proper position, and then closing the handles toward each other, whereby the plate C will split the stock a distance equal to the length of the plate, or nearly so. The depth of the vertical cut is limited by a stop-pin, D.

The handle a is of a considerably greater diameter than the plate C at the point where the latter is connected with the former, thus forming shoulders a^3 , against which the end of the stock will abut. In this manner the slitting of the stock is effected without danger of its being injured, and in a very expeditious manner, and a slit of proper length for the introduction of the scion is always formed, thus avoiding the liability of slitting the stock more than is absolutely necessary for the purpose of grafting. The enlarged recessed part A^2 of the section A, in conjunction with the tapering portion B^2 of section B, serves to prepare the scion for introduction into the slitted stock, which may be effected by laying the end of the scion in one or the other of the tapering recesses a^2 , the enlarged part A^2 serving as a bearing for the fingers of the operator, then closing the blades, whereby the end of the scion is beveled upon one side. By turning the scion and repeating the operation its end will be beveled upon the opposite side, thus giving it the double-bevel or wedge shape necessary for

properly fitting the scion into the previously-slitted stock. The two are tied or otherwise secured in any usual or approved manner, which finishes the process of grafting.

5 In one and the same instrument I provide means for cutting horizontally, vertically, and at an angle, and also means for measuring the diameter of the stock and scion, thus providing a grafting implement capable of performing
10 all the work required in preparing the stock and scion for union. The shears may also be used for priming purposes.

Having thus described my invention, I claim—

15 1. A grafting implement or shears consisting of two cutting-blades, one being formed tapering from near its base to its point on a straight line, and the other being formed tapering from its outer edge toward its base on
20 inclined lines, and having tapering recesses a^2 , substantially as and for the purposes specified.

2. A grafting implement or shears consisting of two cutting-blades, one being formed
25 tapering from near its base outward and the other from its outer edge toward its base, the

latter blade having tapering recesses a^2 , substantially as described, for the purposes specified.

3. A grafting implement or shears composed
30 of the section A, consisting of the handle a and cutting-blades A' C, and the section B, pivoted to section A, consisting of the slotted handle b and cutting-blade B' B², all constructed and operating substantially as and for the pur-
35 poses specified.

4. A grafting implement or shears composed of the section A, consisting of handle a , cutting-blade B', having recesses a^2 , and the cutting-blade C, and stop-pin D, and the section
40 B, pivoted to section A, consisting of the handle b , having slot F, recess b' , and cutting-blade B' B², all constructed and operating substantially as and for the purposes specified.

In testimony that I claim the foregoing I
45 have hereunto set my hand this 1st day of August, 1882.

A. DE CAUNES.

Witnesses:

BONNET,

E. CABRILLUE.