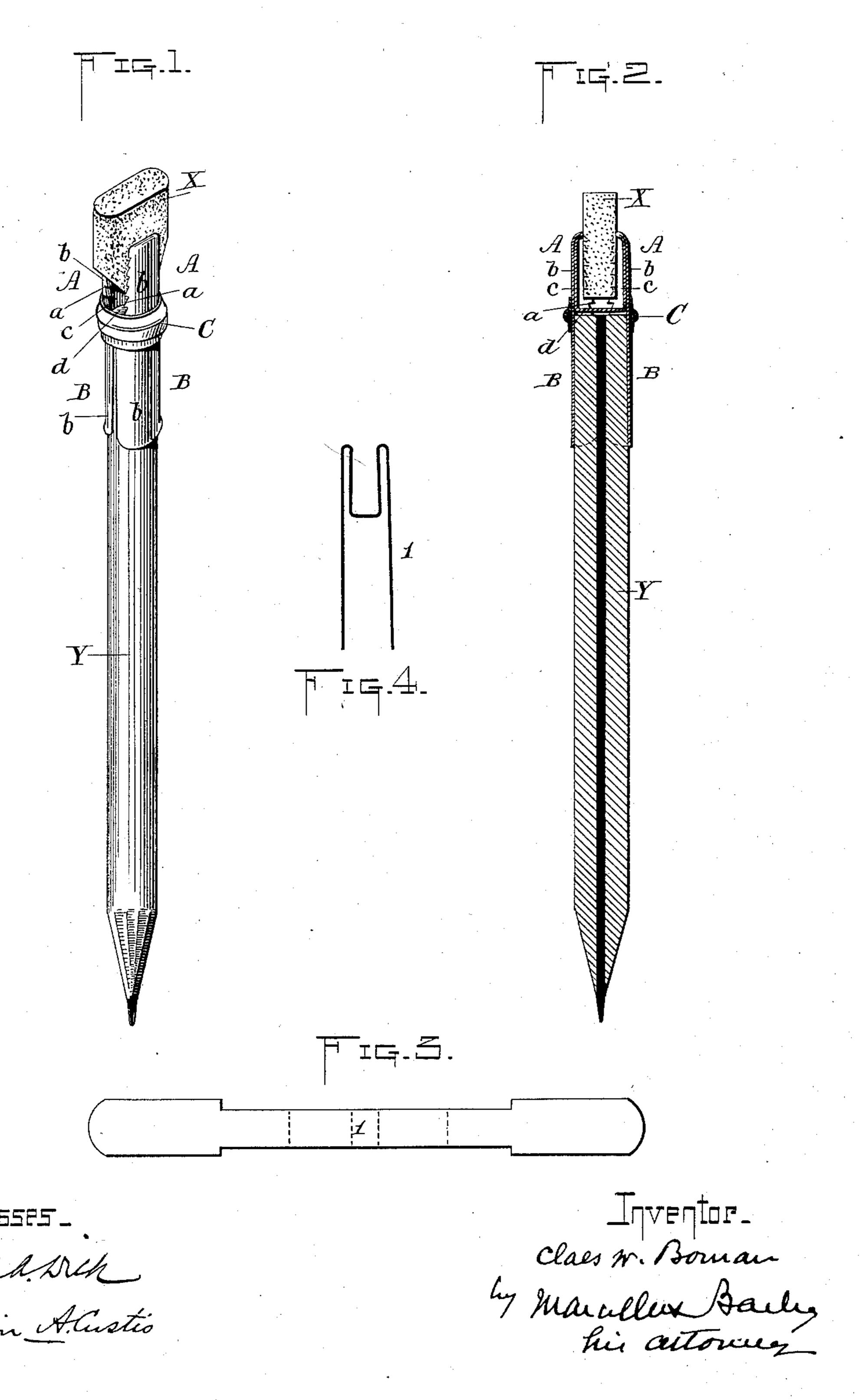
(No Model.)

## C. W. BOMAN.

RUBBER TIP ATTACHMENT FOR LEAD PENCILS AND THE LIKE.

No. 363,583.

Patented May 24, 1887.



## United States Patent Office.

CLAES WM. BOMAN, OF NEW YORK, N. Y., ASSIGNOR TO THE EAGLE PENCIL COMPANY, OF SAME PLACE.

## RUBBER-TIP ATTACHMENT FOR LEAD-PENCILS AND THE LIKE.

SPECIFICATION forming part of Letters Patent No. 363,583, dated May 24, 1887.

Application filed April 4, 1887. Serial No. 233,614. (No model.)

To all whom it may concern:

Be it known that I, CLAES WM. BOMAN, of the city, county, and State of New York, have invented a certain new and useful Improvement in Rubber-Tip Attachments for Lead-Pencils and the Like, of which the following is

a specification.

The rubber-tip attachment which I have devised consists of two pairs of jaws, the one pair composed of a double thickness of metal, the other pair composed of a single thickness of metal, the opposite jaws being connected by a cross-strip, which constitutes a dividing-partition between the two pairs of jaws. This device is conveniently made of a single strip of sheet metal, which by means of suitable appliances can readily be struck up into the desired shape.

The nature of my improvement can best be 20 explained and understood by reference to the

accompanying drawings, in which-

Figure 1 is a perspective view of the device applied to a lead-pencil. Fig. 2 is a longitudinal central section of the same. Fig. 3 is a view of the strip or blank from which it can conveniently be made. Fig. 4 represents diagrammatically the bend given to the strip in order to form the two sets of jaws.

The strip of sheet metal l, Fig. 3, is of length and dimensions required for the device. This strip is bent into approximately l shape, and is then swaged or struck up by means of dies or other suitable known appliances into the form indicated in Figs. 1 and 2, 1 having the two sets of clasping or holding jaws A and B. The jaws A in this instance are intended to hold the rubber l, and for this purpose have their edges serrated, as at l, or otherwise suitably formed to take hold of the rubber. The jaws A are composed of two

the rubber. The jaws A are composed of two thicknesses, b c, of the sheet metal, as shown. The two opposite inner layers, c, are connected by the cross-strip d, which constitutes the dividing-partition between the two pairs of jaws and the fulcrum or point on which the

 $a_{5}$  of Jaws and the fulcrum of point on which the jaws move. The outer layers, b, extend past  $a_{5}$ 

the partition d, and their extensions form the clasping-jaws B, which in this instance are adapted to fit upon the pencil Y. The two thicknesses b c are swaged together, in which 50 position they will remain without positive fastening, although, if desired, they may be riveted or pinned together. I can also use a sleeve or ring, C, which may be movable upon the exterior of the jaws. It serves to hold the 55 parts more firmly, and also to afford a better finish to the device at the point where the two pairs of jaws meet.

Under the arrangement shown it will be noted that the opening of the one pair of jaws 60 tends to close the other pair, in which respect the device resembles that described in Letters

Patent No. 345,865, of July 20, 1886.

Having described my improvement, what I claim as new and of my own invention is— 65

1. A rubber-tip attachment for pencils and the like, comprising two sets of jaws, composed the one set of one thickness of sheet metal and the other set of two thicknesses of sheet metal, connected by a cross-strip which constitutes 7c the dividing partition between the two sets of jaws, as and for the purposes hereinbefore set forth.

2. A rubber-tip attachment for pencils and the like, made from a single strip of sheet metal 75 struck up to form two sets of jaws, A B, the one having a double thickness of metal and the other a single thickness of metal, and a cross connecting-strip, d, as and for the purposes hereinbefore set forth.

3. The rubber-tip attachment composed of the two sets of jaws A B and the cross connecting strip d, made from a single strip of metal, and the sleeve or ring C, as hereinbefore shown and described.

In testimony whereof I have hereunto set my hand this 28th day of March, A. D. 1887.

CLAES WM. BOMAN.

Witnesses:

SAMUEL KRAUS, C. S. BRAISTED.