

O. NEWTON.

SPIKE.

No. 18,294.

Patented Sept. 29, 1857.

Fig: 1.

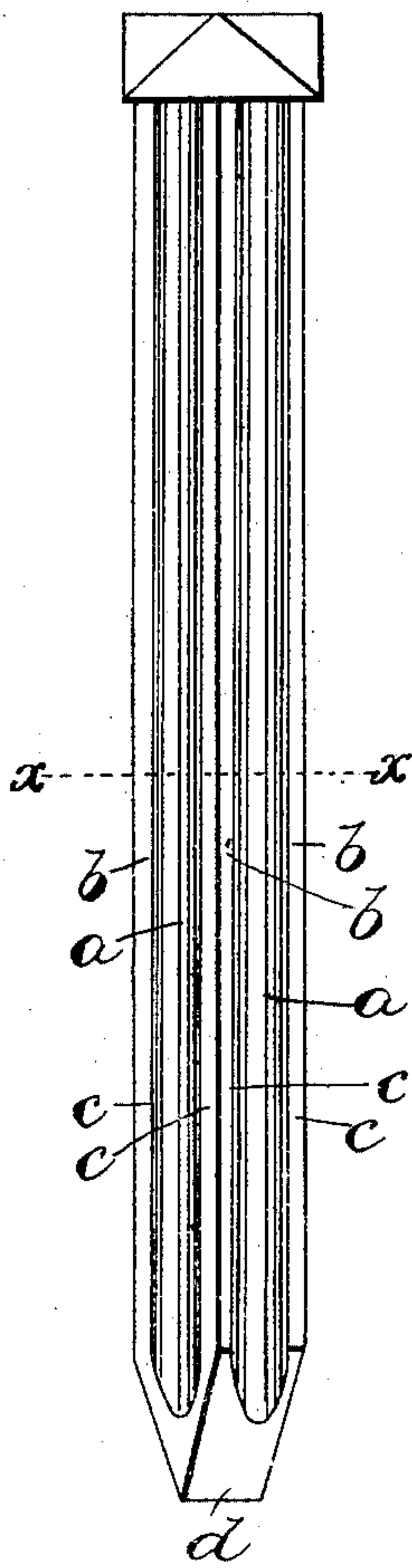
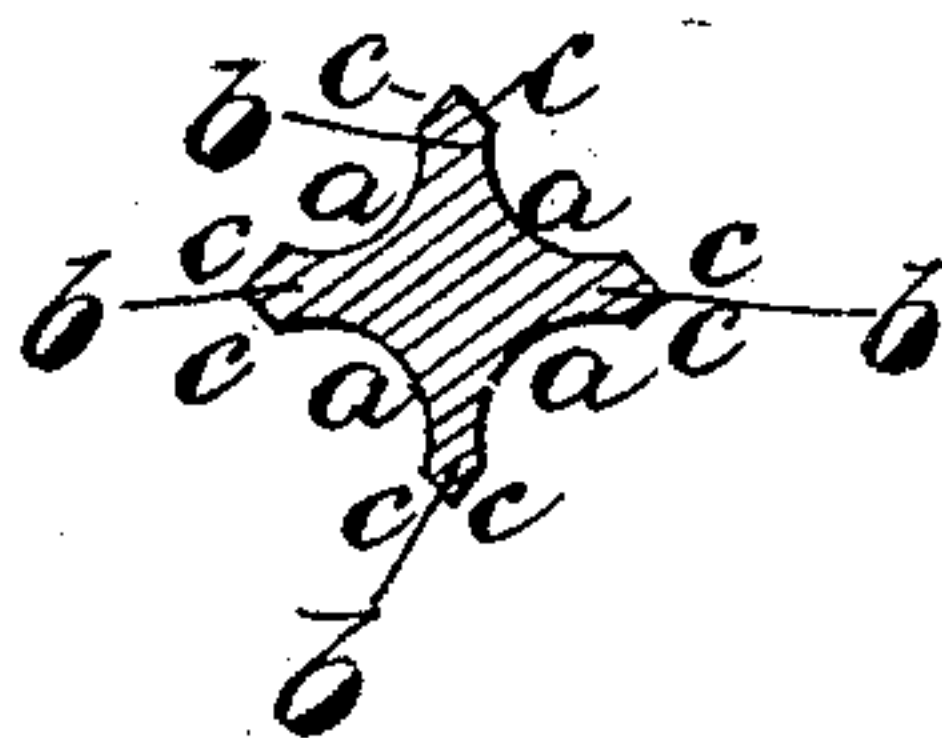


Fig: 2.



UNITED STATES PATENT OFFICE.

ORRIN NEWTON, OF PITTSBURGH, PENNSYLVANIA.

SPIKE.

Specification of Letters Patent No. 18,294, dated September 29, 1857.

To all whom it may concern:

Be it known that I, ORRIN NEWTON, of the city of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in the Construction of Spikes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making
10 a part of this specification, in which—

Figure 1 is a side view of my improvement. Fig. 2, is a transverse section of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in having the sides of the spike made in concave form as will be presently shown and described whereby the greatest possible strength is obtained
20 with a given quantity of metal and the spike rendered very stiff and allowed to penetrate the wood with much greater facility than the spikes hitherto manufactured.

To enable those skilled in the art to fully understand and construct my invention, I
25 will proceed to describe it.

A represents the spike each side (a) of which is made of concave form and is nearly a semi-circle when cut transversely as shown
30 in Fig. 2. The edges (b) formed by the junction of the concave sides (a) are brought to a sharp edge by basils (c) at each side. The point (d) at the end of the spike and

also the head (e) are of the usual form as shown in Fig. 1.

The spike has four sides or I prefer having it quadrilateral. By being thus constructed it possesses great strength with a moderate weight of metal. A spike constructed in the usual manner with the same
40 weight of metal as one constructed according to my improvement would be comparatively weak and would not possess the requisite strength, consequently a considerable saving of metal is effected and in copper and
45 brass spikes the material saved will be of considerable value, owing to the price of said metals. Even in the construction of iron spikes the aggregate saving where large quantities are manufactured would be
50 very considerable.

Spikes thus constructed will readily penetrate wood and consequently much less force will be required to drive them, than is required for the driving of the spikes constructed in the usual manner.
55

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is—

Constructing the spike with concave sides (a) and edges (b), substantially as shown and described for the purpose set forth.
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ORRIN NEWTON.

Witnesses:

THOS. STEEL,
DAVID CHALLINOR.