

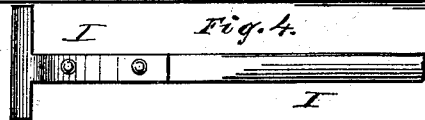
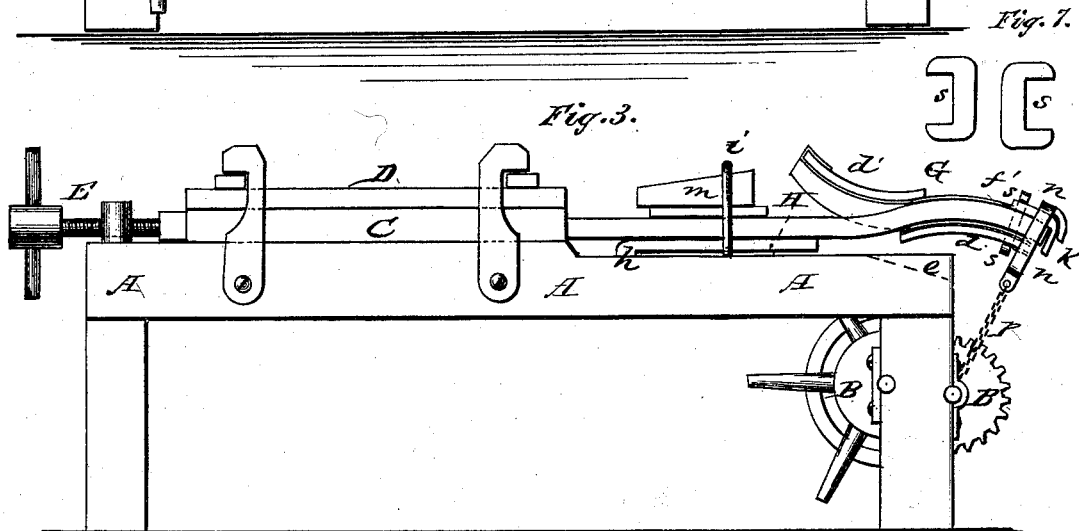
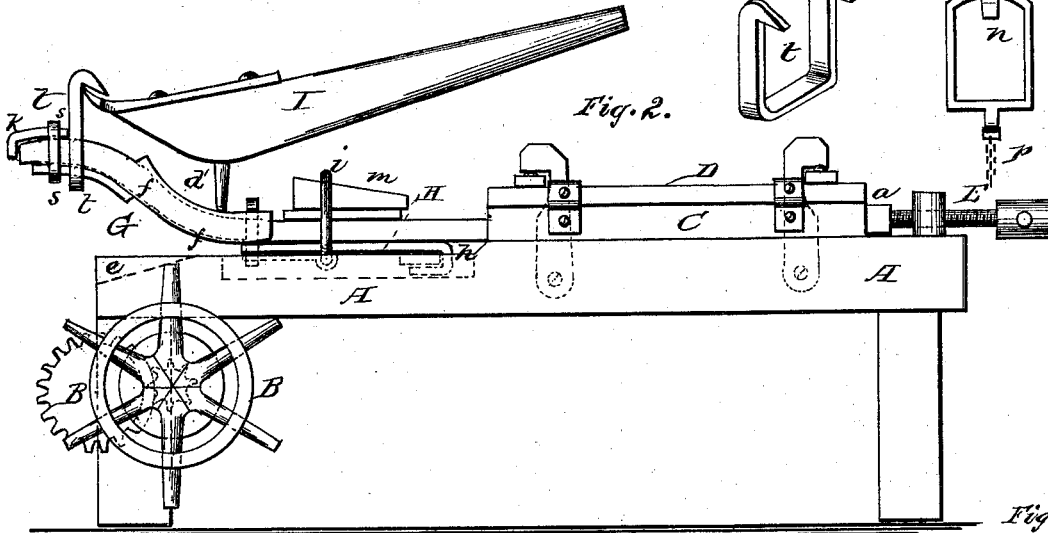
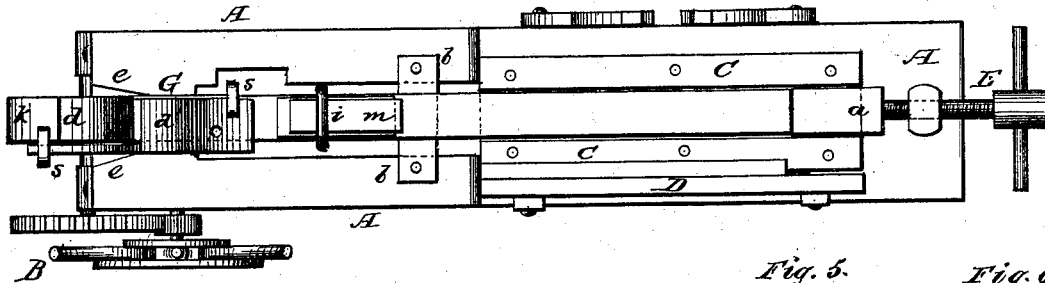
A. G. SNYDER.

Machine for Bending Carriage-Poles.

No. 165,887.

Patented July 20, 1875.

Fig. 1.



WITNESSES:

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ANDREW G. SNYDER, OF ASHTABULA, OHIO.

IMPROVEMENT IN MACHINES FOR BENDING CARRIAGE POLES.

Specification forming part of Letters Patent No. **165,887**, dated July 20, 1875; application filed June 9, 1875.

To all whom it may concern:

Be it known that I, A. G. SNYDER, of Ashtabula, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Machines for Bending Carriage-Poles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a machine for bending wagon or carriage poles, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of my machine. Fig. 2 is a side elevation of the same, in position, while completing the bending. Fig. 3 is a side elevation, showing the position while making the first bend. Figs. 4, 5, 6, and 7 are detached views of certain parts thereof.

A represents the bench, of suitable dimensions, provided at its front end with a windlass, B, of ordinary construction. On the rear portion of the bench A, is formed a box, C, with lid D, and at the rear end of this box is a screw, E, operating against a block, a. In front of the box C, in the bench A, is made a recess with a cross-bar, b. The front end of the bench is rounded or beveled as shown by dotted line at e. G represents the former, made of two curves, d and d'. The outer or front curve, d, has a strap, f, connecting it with a bar, H, formed with a hook, h, on its rear end to fit over the bar b. To this bar is also attached a link, i. The rear curve d' has a strap, f', connecting with an abutment, k.

The straight stick or pole to be bent is put through the link or ring i, up through the former G, against the abutment k, the rear end of the stick being placed in the box C, and the lid D closed and fastened by any suitable means. By turning the screw E the

pole is then forced against the abutment until it is considered taut in the strap. A wedge, m, is then driven in the link i, on top of the pole, and then a ring, n, is placed over the abutment. This ring n is connected to the windlass by a chain, p, and by turning the hand-wheel of the windlass the end of the pole is brought down to the curve d of the former, making the end curve of the pole. It is then fastened by a hook, s. The ring n is then taken off, and an open hook, t, is placed under the end of the former, near the abutment. Into this hook, on top of the former, is then applied a lever, I, having a T-shaped head, as shown in Fig. 2, by means of which the curve d' of the former is brought down on the pole, making the second bend therein. It will be noticed that during this part of the operation the former makes a partial revolution. It is then fastened at this end of the former by another hook, s. Then the lever is removed, and by letting off the screw E, raising the lid D, and moving the former a trifle backward, it, with the bent pole, can be taken off from the bench.

As many formers as may be desired can be used.

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

1. The combination of the box C with lid D, screw E, former G with its attachments, ring n, chain p, and windlass B, all constructed substantially as and for the purposes herein set forth.

2. The combination of the box C with lid D, screw E, former G with its attachments, hook t, and lever I, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

A. G. SNYDER.

Witnesses:

E. W. RICHARDS,
JNO. P. ROBERTSON.