

(No Model.)

S. E. BROWN.
BLANK FOR CARRIAGE STEPS.

No. 435,916.

Patented Sept. 9, 1890.

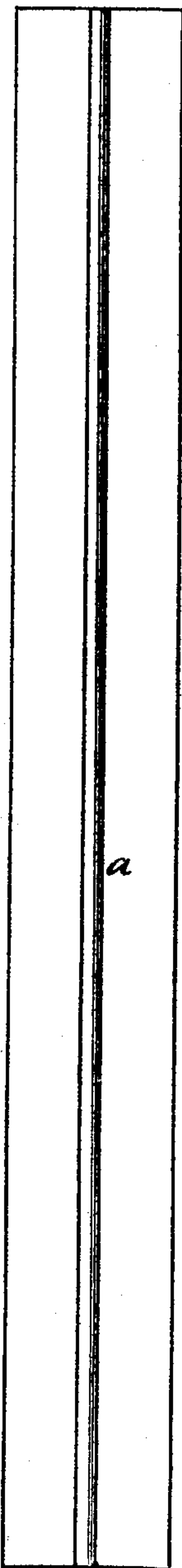


Fig. 1.

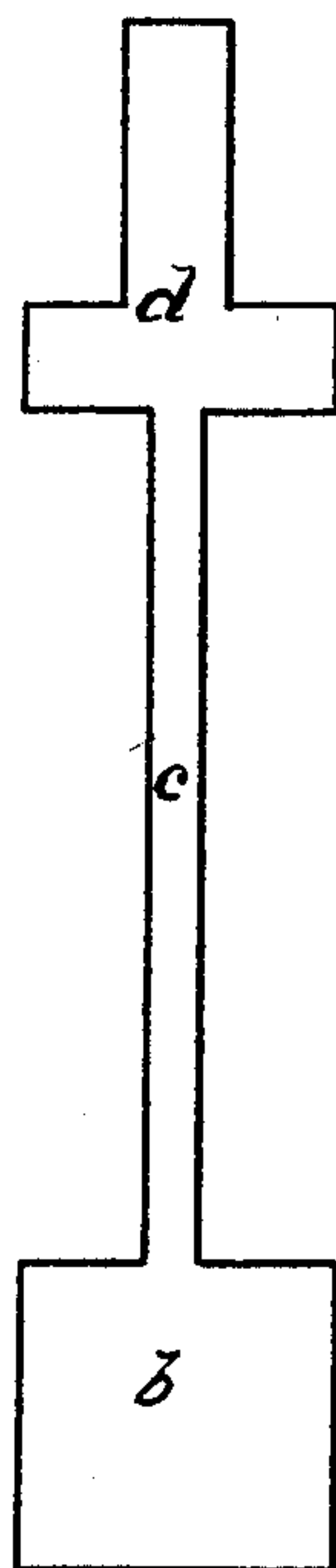


Fig. 2.

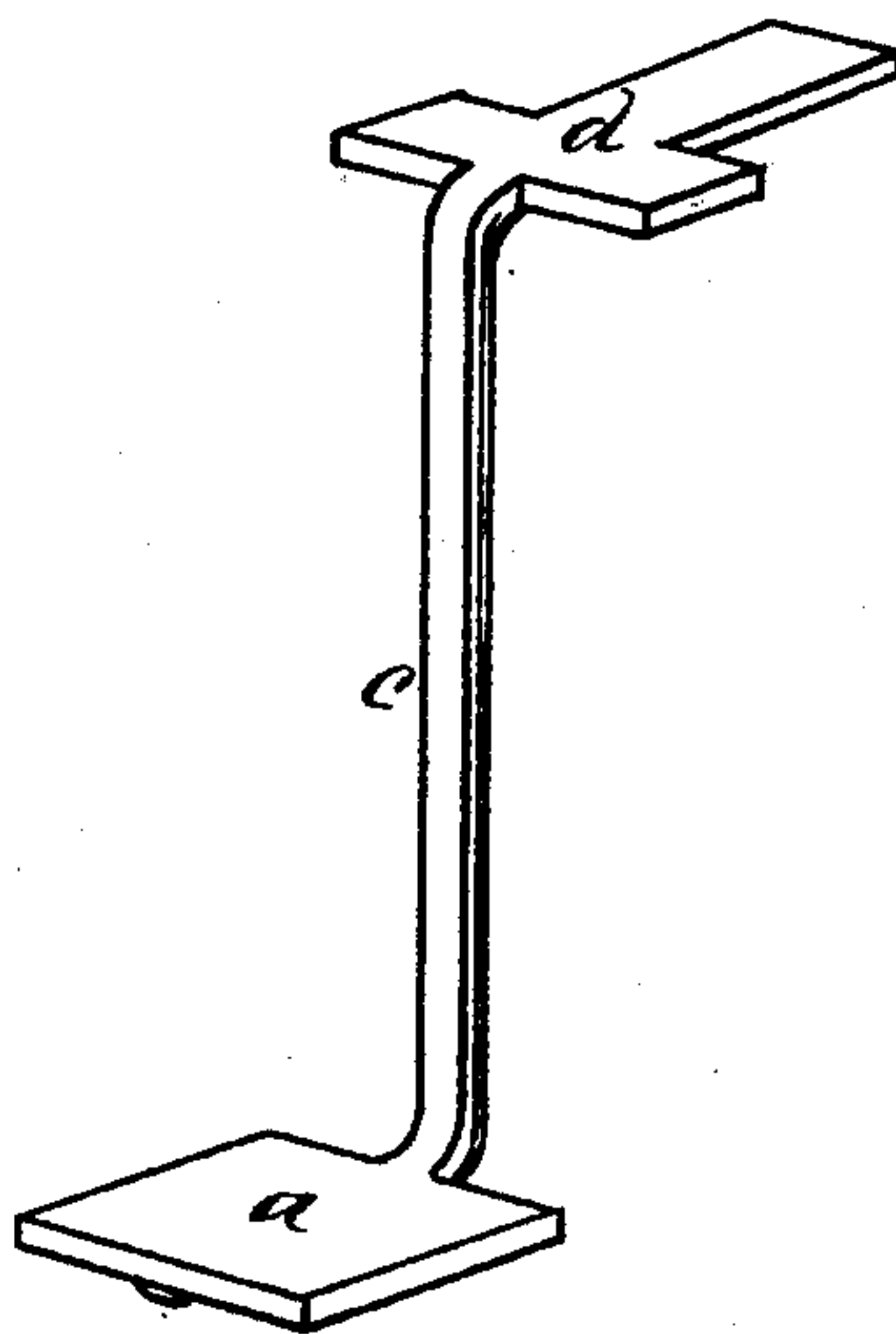


Fig. 3.

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UNITED STATES PATENT OFFICE.

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BLANK FOR CARRIAGE-STEPS.

SPECIFICATION forming part of Letters Patent No. 435,916, dated September 9, 1890.

Application filed May 22, 1890. Serial No. 352,804. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL E. BROWN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Blanks for Carriage-Steps, of which the following is a specification.

This invention relates to steps for carriages and wagons, having for its object to greatly facilitate and cheapen the manufacture of such steps.

The invention consists, first, in rolling the blank plate or bar with a central longitudinal rib along one side, and, second, in cutting, with suitable dies, said plate into portions, forming the step, shank, and cross-head, ready for the third operation—that of bending the step and cross-head at their junction with the shank to complete the blank.

The invention is substantially illustrated in the accompanying drawings, in which—

Figure 1 is a view of the blank-plate, constituting the product in the first stage of my invention. Fig. 2 is a view of a blank step as cut from said plate, and constitutes the product in the second stage of my invention. Fig. 3 is a perspective view of a blank step, showing the blank bent to complete the form of a step in the third stage of my invention.

In carrying out my method of constructing such steps I proceed as follows: With suitable rolls a plate, as seen in Fig. 1, is rolled to the required thickness, with a central longitudinal rib *a* formed on one side. Next,

with a suitable die-press the said plate is cut into portions of required lengths to form the step portion *b*, the shank portion *c*, and the cross-head *d*. Next, the blanks thus cut are bent in the shanks next to the step *b* and head *c*, thus completing the form of carriage-step.

In rolling the plates in the first stage the rolls may have a die set or formed in them for impressing an ornamental form or surface on the parts thereof which will comprise the step and the shank, too, if desired, or when such method is not suitable the blanks may be passed through a drop-press for impressing any suitable design upon them before being bent. These blanks are susceptible of any form and finish that taste or judgment may suggest. I do not therefore confine myself to any particular forms or dimensions or proportions, as it is obvious these may be varied to a great extent, my object being the economical production of step-blanks adapted to all kinds of carriages, wagons, or carts.

Having described my invention, I claim—

The improved method of making carriage-steps, which consists, first, in rolling a plate with a rib; second, in cutting the blank from said plate; third, in bending the shank and forming the completed step, substantially in the manner and for the purpose set forth.

SAMUEL E. BROWN.

Witnesses:

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