(No Model.)

A. M. WOODMANSEE & C. B. KLOHR.

BUGGY BOOT.

No. 424,588. Patented Apr. 1, 1890

FIG. 1.

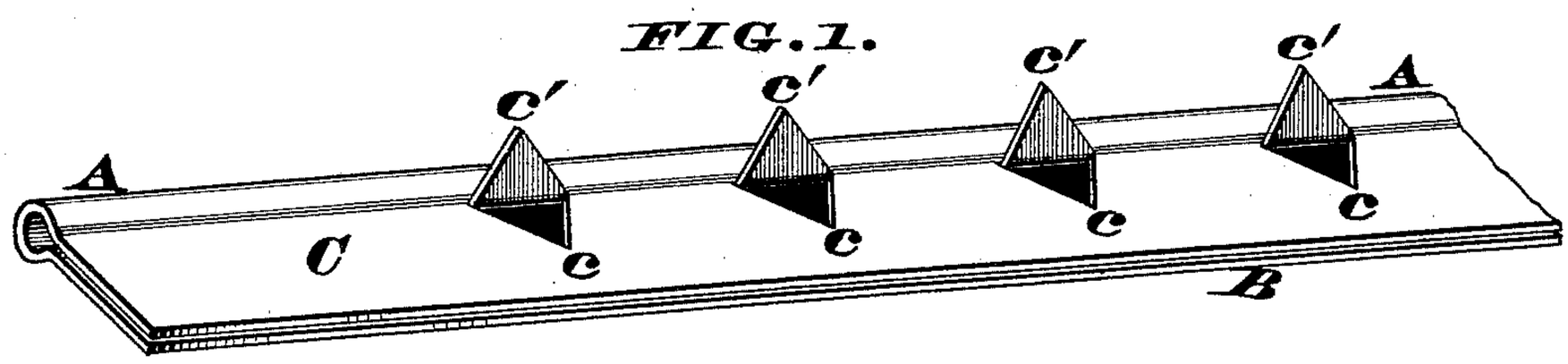

FIG. 2.

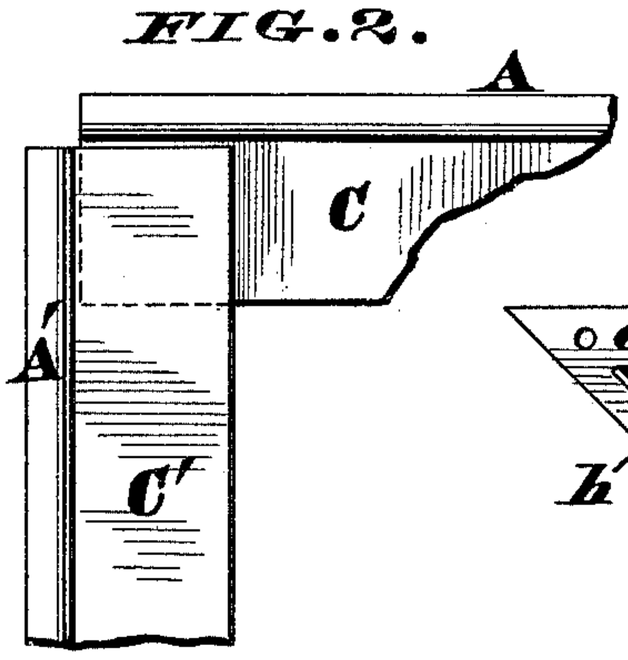

FIG. 3.

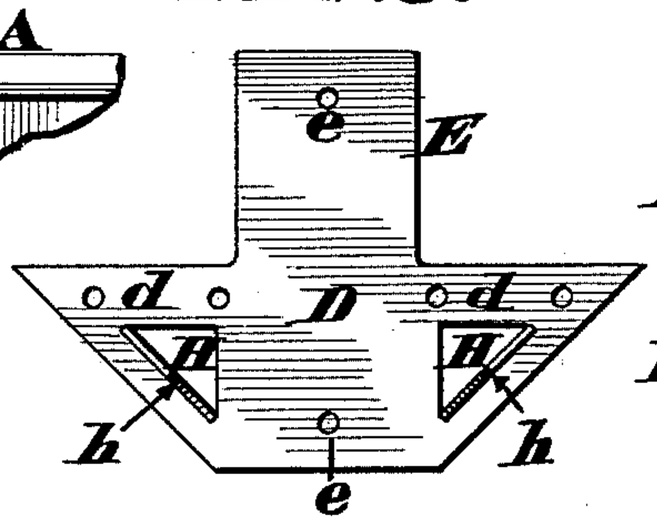

FIG. 4.

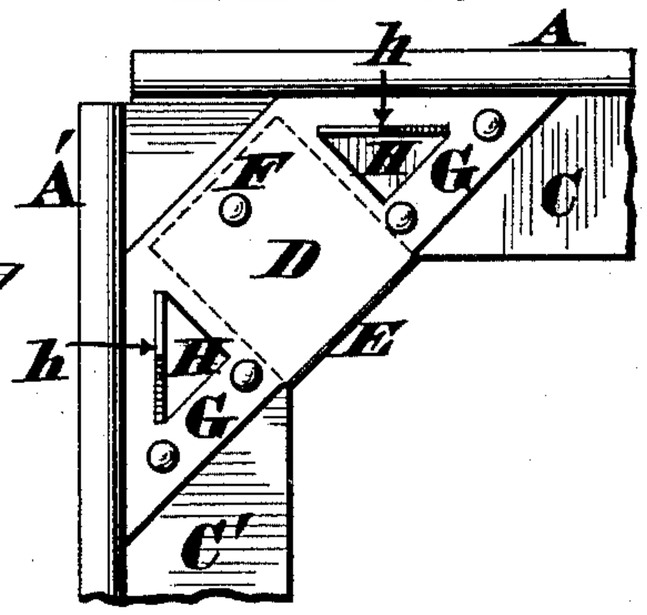

FIG. 6.

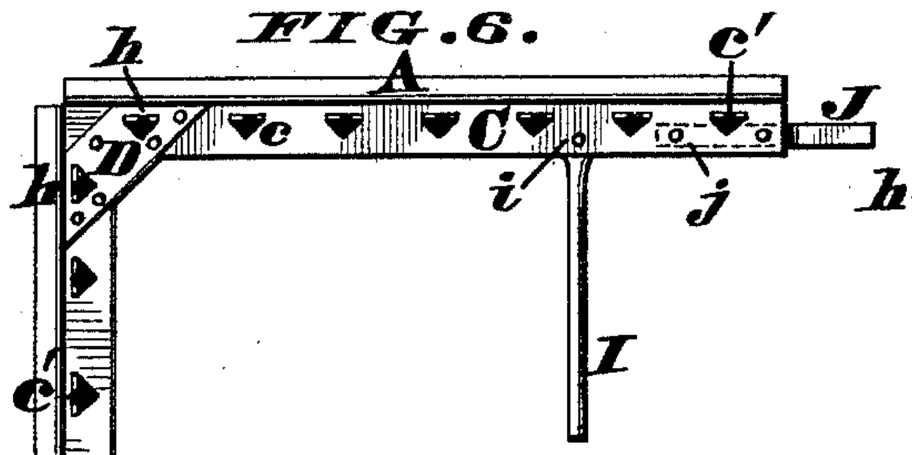

FIG. 7.

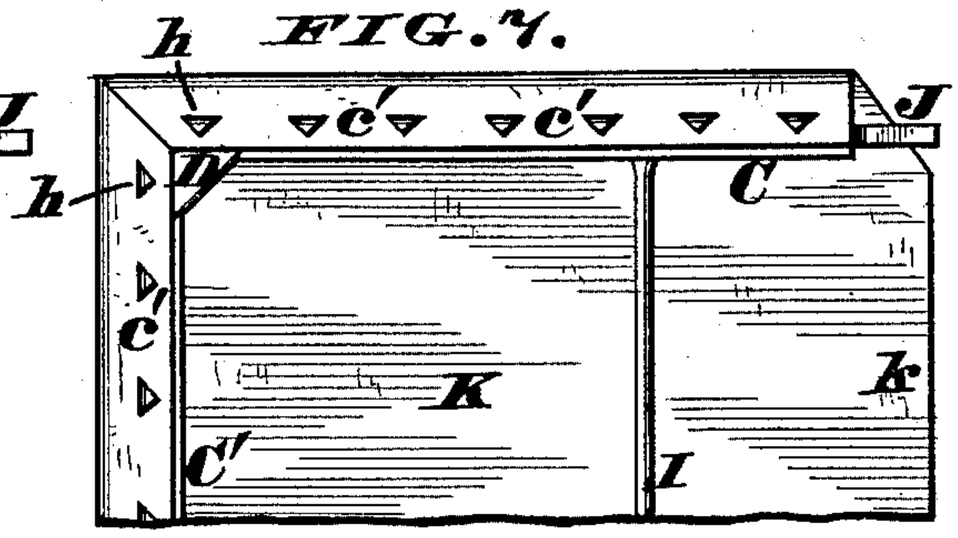

FIG. 5.

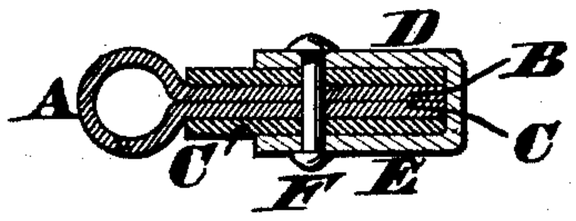

FIG. 8.

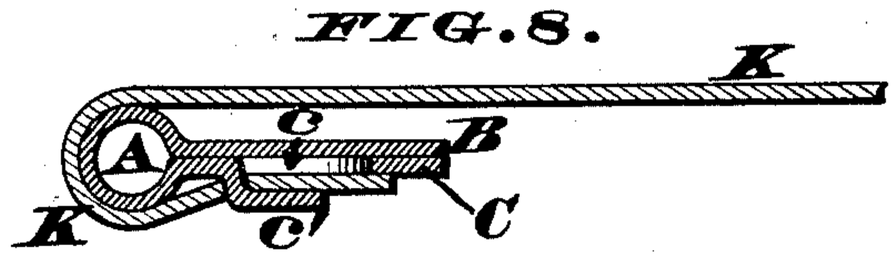

FIG. 9.

Attest.
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UNITED STATES PATENT OFFICE.

ALFRED M. WOODMANSEE AND CHARLES B. KLOHR, OF CINCINNATI, OHIO, ASSIGNORS OF ONE-THIRD TO GEORGE G. LUSHEY, JR., OF SAME PLACE.

BUGGY-BOOT.

SPECIFICATION forming part of Letters Patent No. 424,588, dated April 1, 1890.

Application filed November 25, 1889. Serial No. 331,500. (No model.)

To all whom it may concern:

Be it known that we, ALFRED M. WOODMANSEE and CHARLES B. KLOHR, both citizens of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Buggy-Boots; and we do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the annexed drawings, which form part of this specification.

The first part of our improvements comprises a novel construction of buggy-boot frame to which the covering can be readily and securely applied without employing rivets or other extraneous fastenings, the details of said construction being hereinafter more fully described.

The second part of our improvements comprises a novel form of stiffening-plates which are secured to the angles of said frame, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a perspective view of the under side of a section of our buggy-boot frame. Fig. 2 is a plan showing a pair of said sections joined to make a corner of the frame. Fig. 3 is a plan of the stiffening-plate to be attached to the angle of the frame. Fig. 4 is a plan showing said plate secured to the frame. Fig. 5 is a vertical section through the frame and plate. Fig. 6 is a plan of the under side of the complete frame. Fig. 7 is a plan of a portion of the frame with its covering attached thereto. Fig. 8 is an enlarged vertical section showing the method of securing said covering to said frame. Fig. 9 is a vertical section showing the complete boot attached to a buggy.

Our buggy-boot frame is composed of three precisely-similar sections constructed as shown in Fig. 1, wherein A represents a bead or swell formed by bending a piece of sheet metal back on itself, so as to afford an upper strip B and lower strip C, which strips are parallel with each other and in contact when said frame is complete. Furthermore, this lower strip C has a series of angular incisions *c* made in it, thereby affording pointed tongues or clips *c'*, which are bent until they are about perpendicular to said strip. This strip may form one of the ends of the frame.

A' and A'' in Fig. 6 represent the beads of the rear section C' and end section C'' of said frame, said sections being provided with tongues *c'*, formed as previously described.

D in Fig. 3 represents a plate-stiffener of such a shape as to fit snugly within one of the corners or angles of the frame, as seen in Fig. 4, said plate being provided with a lateral extension E, capable of being bent in under the pieces composing said corner, as seen in Fig. 5. *e* are perforations in said plate and extension to admit a rivet F, and *d* are perforations in the plate to admit other rivets G. H are angular incisions cut in said plate to afford tongues *h*, which are similar to the tongues *c'*.

I is a rod, whose opposite ends are flattened and then secured between the strips by rivets *i*, and J J' are plate-springs secured between the front portions of said strips by rivets *j j'*.

K is a customary boot-covering having a free edge *k*, that projects in front of the frame, as seen in Fig. 7, which portion of said frame is usually bent, as seen at *a* in Fig. 9, to conform to the shape of the buggy-body. L in said illustrations is a rail that supports the rear of the buggy-seat M.

The various sections of our frame are fitted together in the following manner: The strips B C of the end section are pressed together and inserted between the strips of the rear section C', as seen in Fig. 5 and indicated by dotted lines in Fig. 2, care being taken to have said sections at right angles to each other. The plate D is then placed upon the sections C C', as seen in Fig. 4, and the extension E is bent under the frame, after which act the rivets F G are inserted in their appropriate holes and headed up, the rivet F being passed through six thicknesses of metal, while the other rivets G traverse three thicknesses of the same. Consequently the corner is securely braced and cannot lose its correct shape. The other end section C'' is fastened to the rear section C' in a precisely-similar manner, thereby forming a light but rigid three-sided frame, which is further stiffened by the application to it of the tie-rod I. The plate-springs J J' are then attached to the frame so as to project about two or three

inches, which is sufficient to adapt the boot to the ordinary size of buggies. Covering K is then applied to the frame, the margins of the former being forced down upon the pivoted tongues *c'*, which penetrate said covering in the proper places, and thereby prevent special slits being cut in it. These upturned tongues are then bent down, thus clamping the margins of the covering against the strip C, as seen in Fig. 8, and completing the construction of the boot, which is applied to a buggy in the manner represented in Fig. 9. Reference to this illustration shows that the front or free edge of the covering is tacked to the rail L and the spring J is so bent as to bear against the under edge of the seat M. Therefore the springs preserve the boot in its closed position and prevent any rattling, while at the same time they enable the rear of the boot to be raised for the purpose of affording access to the buggy-box. Finally, the bead A imparts a finished appearance to the covering and prevents it being cut or cracked when it is drawn over the edge of the frame, and, if desired, this edge may be furnished with a metallic molding similar to those applied to dashes and other carriage-fittings.

We claim as our invention—

1. A buggy-boot frame consisting of a number of sections joined together at the corners, each section being composed of a piece of sheet metal bent back on itself, so as to afford two parallel strips, one of which is provided with integral tongues, for the purpose stated.

2. A buggy-boot frame consisting of a number of sections joined together at the corners, each section being composed of a piece of sheet metal bent back on itself, so as to afford a bead A, and two parallel strips B C, the strip C being provided with integral tongues *c'*, for the purpose stated.

3. In combination with a sheet-metal buggy-boot frame constructed as herein described, the stiffening-plate D, having an extension E, and integral tongues *h h*, which plate is secured at the corner of said frame, for the purpose described.

4. The combination, in a buggy-boot, of a frame consisting of side sections C C'', a back section C', and a tie-rod I, uniting the front of said side sections, each of these sections C C' C'' being composed of a single piece of sheet metal bent back on itself, so as to afford a pair of parallel strips, and the under strips being provided with integral tongues *c'*, wherewith the covering K is attached to said frame, all as herein described.

In testimony whereof we affix our signatures in presence of two witnesses.

ALFRED M. WOODMANSEE.
CHARLES B. KLOHR.

Witnesses:
JAMES H. LAYMAN,
GEO. LUSHEY.