

(No Model.)

2 Sheets—Sheet 1

G. N. BEMAN, G. C. BECKWITH & A. M. WOOD.
CARRIAGE BODY.

No. 341,215.

Patented May 4, 1886.

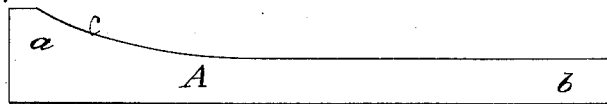


Fig. 1



Fig. 2



Fig. 3.

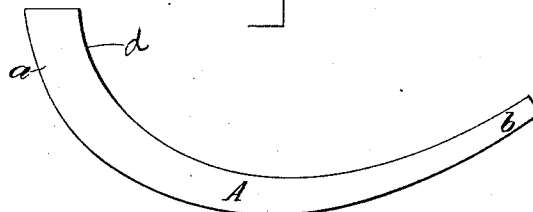


Fig. 4

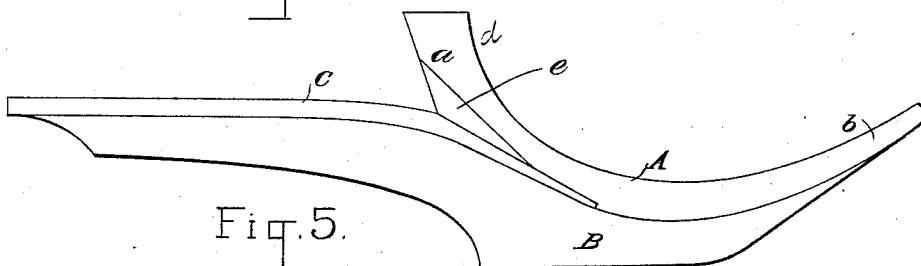


Fig. 5.

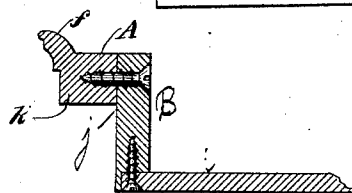


Fig. 6

WITNESSES

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per D. W. Dexter Atty.

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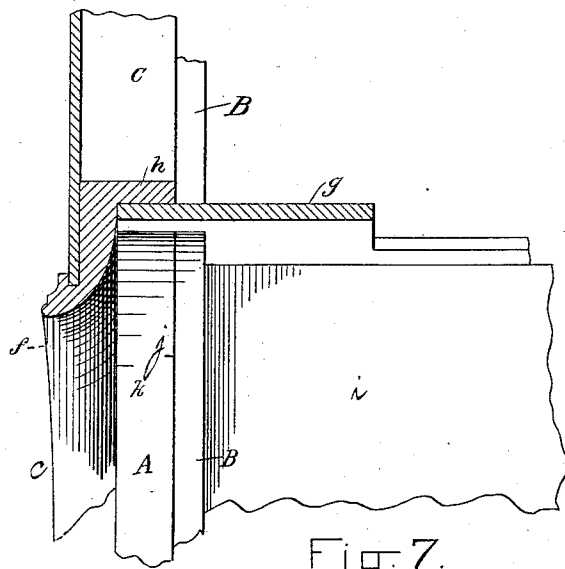


Fig. 7.

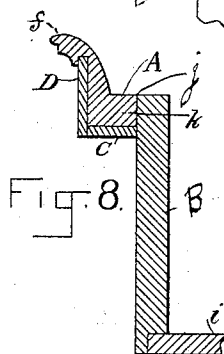


Fig. 8.

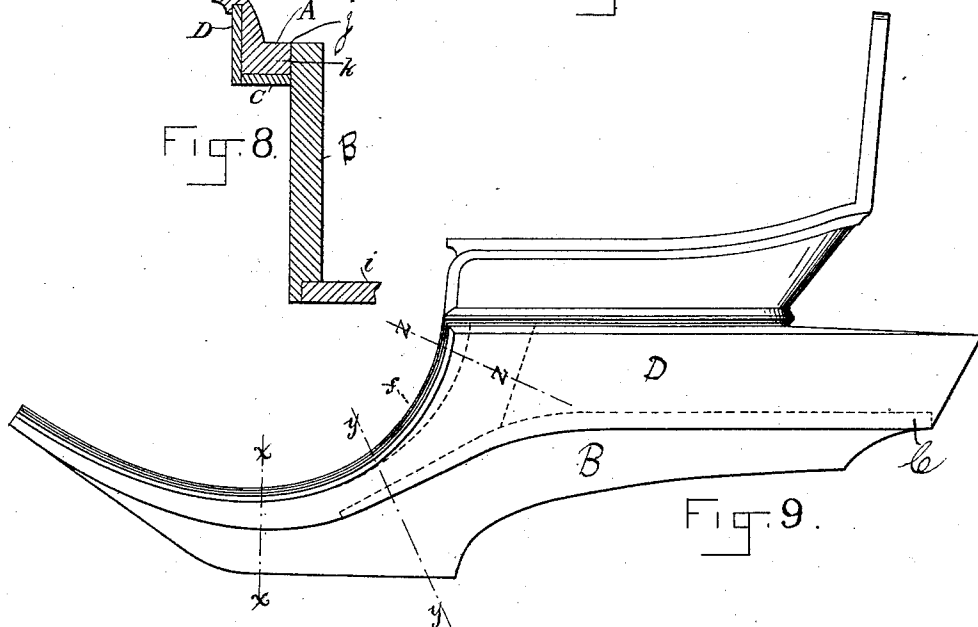


Fig. 9.

WITNESSES.

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UNITED STATES PATENT OFFICE.

GEORGE N. BEMAN AND GEORGE C. BECKWITH, OF BOSTON, AND
ALEXANDER M. WOOD, OF SOMERVILLE, MASSACHUSETTS.

CARRIAGE-BODY.

SPECIFICATION forming part of Letters Patent No. 341,215, dated May 4, 1886.

Application filed February 26, 1886. Serial No. 193,274. (No model.)

To all whom it may concern:

Be it known that we, GEORGE N. BEMAN and GEORGE C. BECKWITH, of Boston, in the county of Suffolk, and ALEXANDER M. WOOD, of Somerville, in the county of Middlesex, and all of the State of Massachusetts, have invented a new and useful Improvement in Carriage-Bodies, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

Figure 1 is a top plan view showing the blank from which we form our improved duster-piece. Fig. 2 is an edge elevation of the piece shown in Fig. 1, and as it is first cut from the plank. Fig. 3 is a view like Fig. 2, but showing the piece curved on top at one end and diminished in thickness in the remainder of its length. Fig. 4 shows the duster-piece as bent into the desired curvature. Fig. 5 shows our improved duster-piece, the sill, and the rocker, as united together. Fig. 6 is a transverse section taken as on line X X, Fig. 9, through the duster-piece, rocker, and part of the floor of the completed body. Fig. 7 is a section like Fig. 6, but taken as on line Y Y. Fig. 8 is a transverse section taken on line Z Z, Fig. 9. Fig. 9 is a side elevation of a buggy, introduced to illustrate the nature and use of our invention.

Our invention is for use in that class of carriage-bodies which have a cut-down front, a side panel at the rear portion, and a pillar which receives the front end of said panel and constitutes the rear upper portion of the cut-down; and the invention is shown in the drawings in connection with that class or style of body known to the trade as the "Goddard buggy."

In said drawings, A represents the blank for the duster-piece, which is shown in Fig. 1 in plan, and at the widest part *a* is about five inches wide. In Fig. 2 this blank is shown in edge elevation, and cut from plank about three inches thick. The top side of the blank is formed at *a* with a curve, and the balance of the blank *b* is reduced in thickness, as shown in edge elevation in Fig. 3.

When the blank has been formed as shown in Figs. 1, 3, it is steamed and bent upon a mold to the form shown in Fig. 4, the curve

at *d* constituting the rear portion of the upper concave line which was next the mold on which the bending was done, said curve *d*, formed by reducing the blank before bending, serving to relieve the blank and bending machinery from severe and dangerous strain.

The curved-edge line *c* constitutes the outthrow or flare of the pillar, while the straight line or edge *j* is secured to rocker B, which, in the usual manner, is cut from a straight board with the desired curvature at its upper and lower edges, the floor *i* being secured to the lower edges, as shown. After piece A has been bent and fully set a stay-piece, *e*, is preferably glued to it; but this is optional, as piece A may be of desired thickness to dispense with piece *e*. Said piece *e* is not claimed as any part of our invention, as such stay-pieces are of common use. After the piece A is thus prepared it is molded to shape to form the sill-like portion *k*, to which rocker B is secured; also to form the "duster" *f*, which is a molded outwardly-curved rib or lip, and also to form the slanting lip *h*, to which the seat-riser or heel-board *g* is at its ends secured, as shown in Fig. 7.

The sill-piece C is united with A by a scarf-joint, as shown in Fig. 5, the upper line of sill-piece C and the upper line of the forward portion of *k* coinciding with the curvature of the upper edge of rocker B. The under edge of rear portion, *a*, is formed with a groove, as shown in Fig. 7, to receive the front curved edge of side panel, D, the part *a* thus constituting the pillar.

Heretofore sill *c* has extended the entire length of rocker B, and, like the rocker, being cut from straight-grained timber, the two lacked the requisite strength at the front end, whereas at *b* the sill is necessarily much reduced in width, so that the hanging-irons are attached to the rocker; but with our invention the rear end of *c* and part A have the grain of the wood coincident with their longitudinal line, and hence have the desired strength, while the joining of A and C is at a point where part B has great strength. Besides, when sill C extended the length of rocker B a pillar in the place of part *a* was united with the sill by a scarf-joint and tenon, and hence the edge of the toe of the pillar and the end grain of the

sill abutted together, forming a joint in the upper face of the sill and duster, which joint would become unglued and unsightly, as the top of the sill and the duster are not trimmed, but painted, and hence such joint, besides admitting water, and so injuring the body, was a positive disfigurement, while our duster piece is not only continuous throughout the line of the cut-down, but the grain of the wood follows the curve of the cut-down, and panel D covers the joint between parts A C, as shown in Fig. 9.

We are well aware that it is not new to form vehicle-sills by bending, as divers patents have been granted for such improvements; hence we do not broadly claim a bent sill; but

We claim as follows, to wit:

1. The combination of sill-piece C and duster-piece A, the latter being bent and set to form and the two united, substantially as specified.

2. The combination of rocker B, sill-piece C, and duster-piece A, the latter being bent

and set to form and united with the other parts, substantially as specified.

3. A duster-piece bent and set to form, so that its rear portion constitutes a pillar with an outward flare, and its forward portion serves as a continuation of the sill, substantially as specified.

4. A duster-piece bent and set to form, and having the broadened pillar portion *a*, the narrow portion *b*, and the side curve, *c*, substantially as specified.

5. A duster-piece bent and set to form, and having the broadened pillar portion *a*, the narrow portion *b*, the side curve, *c*, and shaped with sill-like portion *k*, duster *f*, and lip *h*, all substantially as specified.

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