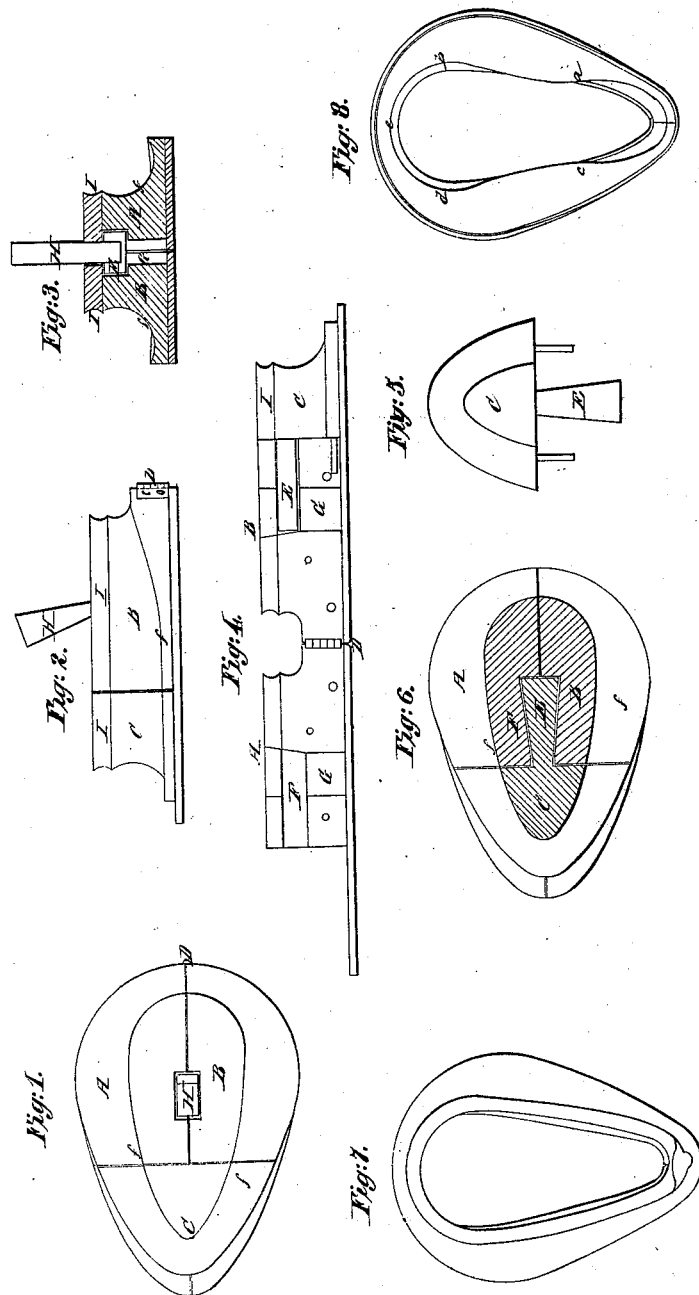


W. H. Bustin,
Horse-Collar Machine,
Nº 5,975. Patented Dec. 19, 1848.



UNITED STATES PATENT OFFICE.

WILLIAM H. BUSTIN, OF WATERTOWN, MASSACHUSETTS.

HORSE-COLLAR BLOCK.

Specification of Letters Patent No. 5,975, dated December 19, 1848.

To all whom it may concern:

Be it known that I, WILLIAM H. BUSTIN, of Watertown, in the county of Middlesex and State of Massachusetts, have made a
5 new or Improved Block to be Used in the Manufacture of Horse-Collars, and that the following description and accompanying drawings taken in connection constitute a full and exact specification of the same.

10 Figure 1, of the drawings above mentioned, represents a top view of the afore-said block. Fig. 2, is a side elevation. Fig. 3, is a transverse vertical section taken through its widest part. Fig. 4, is a view
15 which exhibits the hinged parts of the block, as thrown into a line with each other, so as to display the interior arrangement of the same.

The said block is for the purpose of expeditiously giving a correct form to a harness collar or for stretching a collar after it is made.

It consists of three parts or sections A, B, C, the first two of which are hinged
25 together as seen at D, Figs. 1, and, 4. The other part, viz. C, has a reversed wedge shaped tenon E, extending rearward from it as seen in Fig. 5, which is a top view of the part or section C, as it appears when removed from juxtaposition with the others.
30 The said tenon enters into a corresponding mortise formed partly and equally in each of the sections A, B, the said mortise being exhibited at F, in Fig. 6, which denotes a horizontal section of the block taken through
35 the center of the said mortise. Another mortise G, is cut vertically through the rear part of the first mortise, and partly and equally in each of the sections A, B. A wedge H, is inserted in the mortise G, and extends
40 downward behind and in contact with the rear end of the tenon, and rear end of the vertical mortise. When the said wedge is driven down so as to force the tenon forward
45 it not only causes the two sections A, and B, to separate from each other or turn slightly in their hinge D, but at the same time it throws the section C, forward or from the sections A, and B. The upper part of the sides of the
50 sections, is grooved out as seen at I, I, in the drawings, the said groove extending entirely around the block, and is for the purpose of receiving that part of the collar generally termed the roll, or part thereof just in
55 rear of and around which the hames extend.

The said groove serves a double purpose, viz. that of holding the collar in place, and keeping it from slipping upward. Also, to stretch the roll part of the collar independently of the pad; this being effected by reversing the position of the collar, so that the
60 pad shall be upward, and the roll only be in the groove. The sides of the block below the part I, I, are to be hollowed out or shaped to correspond with that part of a horse's neck
65 and shoulders, against which the collar usually rests when worn, or in other words they are to have such form given them as will accomplish the end to be sought, viz. the production of such a shaped cushion as will not
70 gall or chafe a horse. Fig. 7, represents a front and Fig. 8, a rear view of a collar. The parts of the cushion or pad from *a*, to *b*, and from *c*, to *d*, Fig. 8, are those against
75 which the horse's shoulders bear while in the act of drawing a load, and these should be so well stuffed and formed as to throw the part *b*, *e*, *d*, of the pad entirely from, or so
80 as not to bear injuriously against, the lower part of the horse's throat; collar pads having heretofore been formed by the eye, and according to the judgment and skill of the maker. The stuffing of the sides of the pad,
85 and giving to the lower part of the same the correct form, so as not to gall a horse, has generally been a very difficult or nice operation, and could only be intrusted to a very experienced and careful workman.

In my block the sides of the sections A, B, are hollowed out at *f*, *f*, to the degree
90 required to impart a correct form to those parts of the pad which come in contact with the horse's neck and shoulders when drawing a load. The backs of the sections of the block, are to have the required shape given
95 them so as to throw the lower part of the pad in a proper degree from the throat of the horse.

The roll of the collar and casing of the pad being formed in the usual way preparatory to stuffing the pad, are to be applied to the block so as to bring the roll in the groove
100 I, I. The pad is next stuffed and formed on the block, as will be understood by collar makers. The size of the block may be varied
105 so as to adapt it to collars of any required dimensions by simply driving in or drawing out the wedge H.

I am not aware that a block has ever been used before my invention for the purpose of
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forming the pad of a collar. It has been customary to bend the roll around a piece of wood, formed somewhat like a horse's neck and for the purpose of giving to it the shape required to go over the head and neck of a horse, and properly conform to the hames. The said form is imparted to the roll by the upper part of my block, and the groove keeps the roll in place, while the pad is being stuffed.

From the above it will be seen that the part on which the throat or lower part of the pad of the collar is formed is necessarily made (in order to prevent the pad from galling a horse) with such a curved shape that a collar when formed and stretched on the block would have a tendency to slip upward or off the rear part of the block, particularly as the leather of which the collar pad is formed is at such time more or less saturated with water and grease. In order to prevent the same, the groove I, I, is made in and around the block, or particularly around that part of the block just above the swell

or part of it from which the collar has a tendency to slip.

It will therefore be seen that I do not claim the rim or groove I, I, for stretching the roll of the collar simply, but that as I so form the block that the collar would have a tendency to slip off while being stretched, the rim or groove I, I, becomes essential to preserve it in position or hold it on the block. It is therefore for such purpose that I claim the rim or groove I, I, in combination with the swell or that part of the block from which the collar would have a tendency to rise, in the act of being formed and stretched, the whole being substantially as above described.

In testimony whereof I have hereto set my signature this sixteenth day of September A. D. 1848.

WILLIAM H. BUSTIN.

Witnesses:

R. H. EDDY,
F. GOULD.