

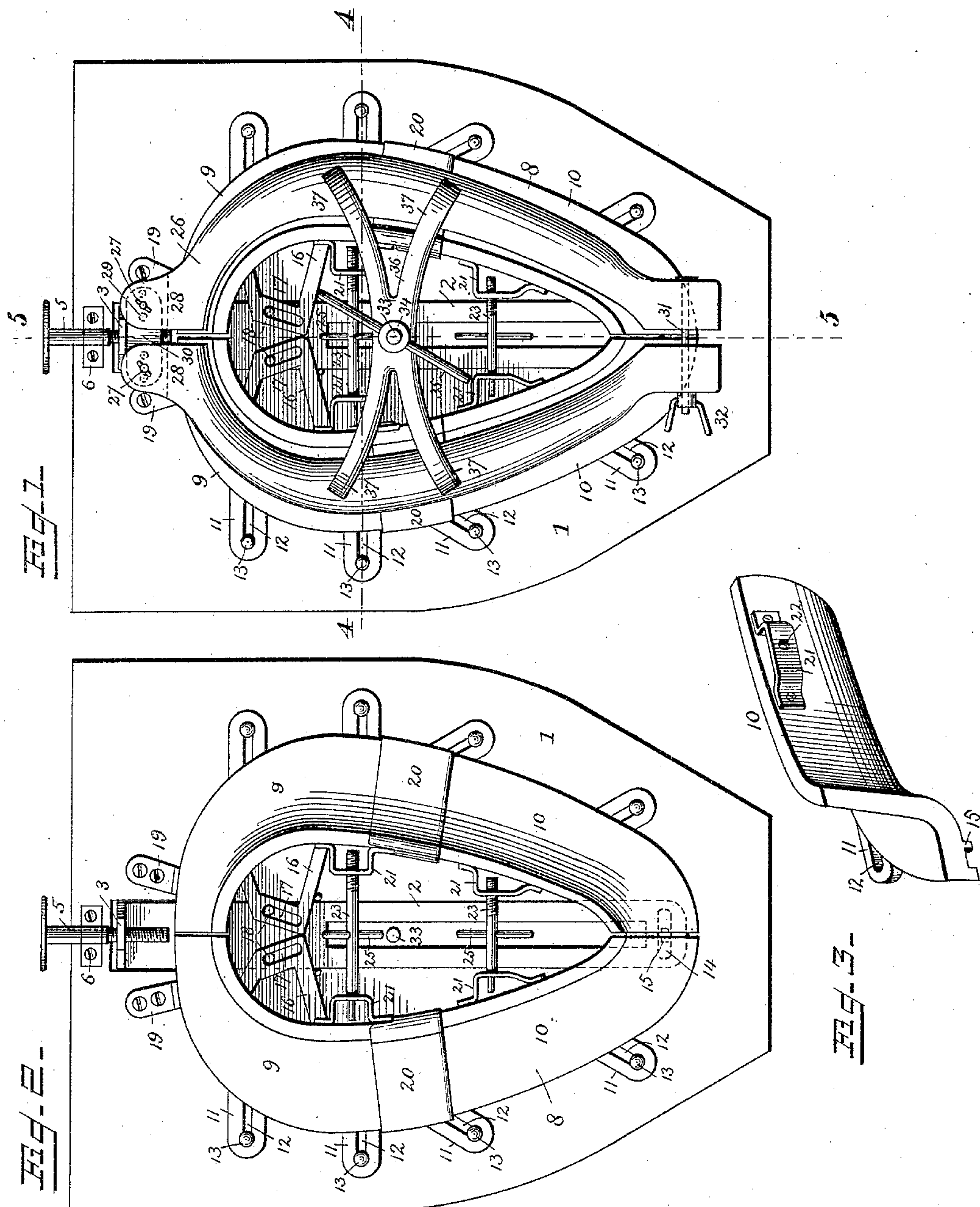
(No Model.)

2 Sheets—Sheet 1.

C. J. McNULTY.  
HORSE COLLAR MACHINE.

No. 442,992.

Patented Dec. 16, 1890.



Witnesses

Chas. H. Curand.

Wm. Bagger.

By his Attorneys,

CA Snow & Co.

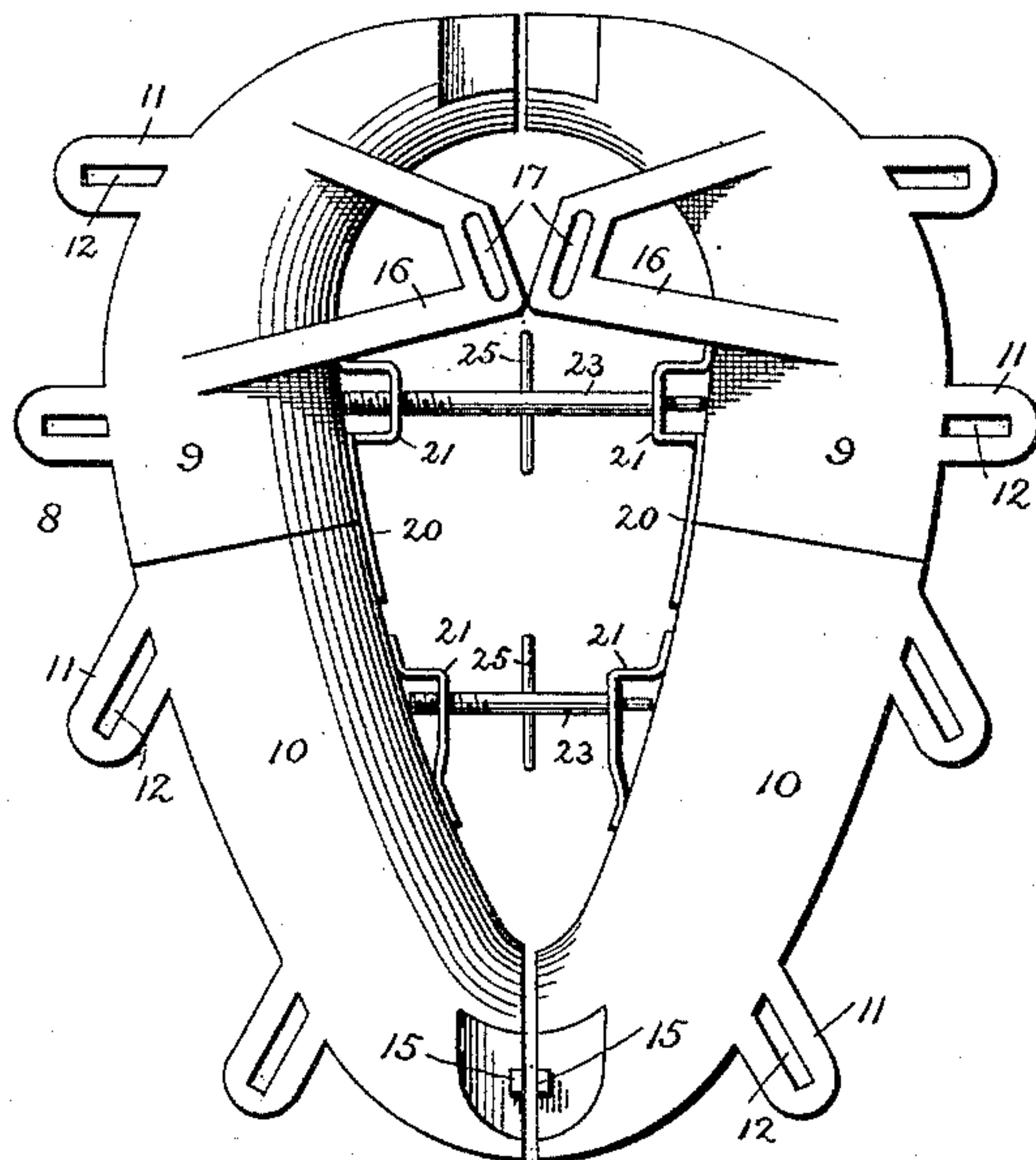
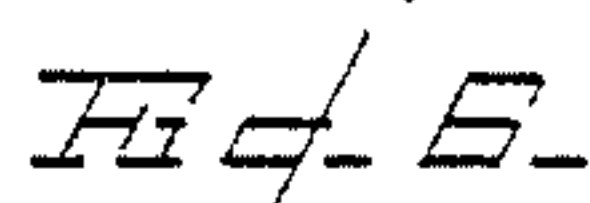
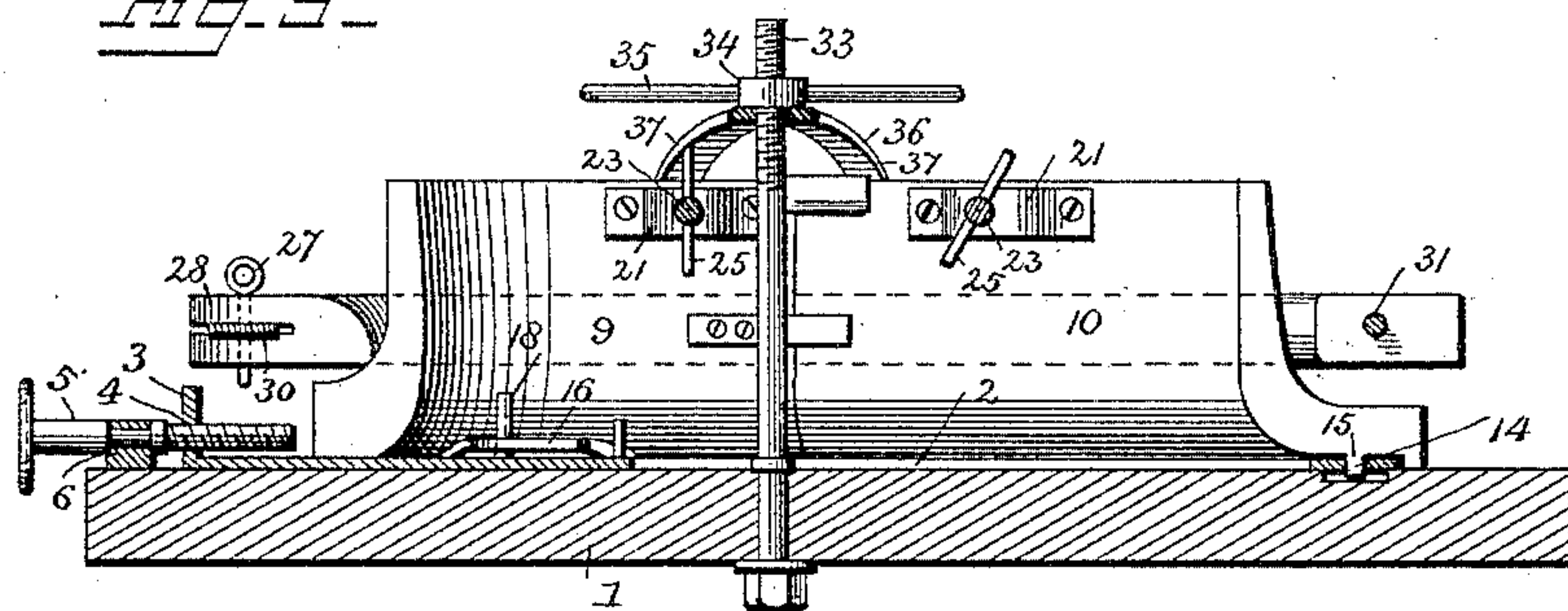
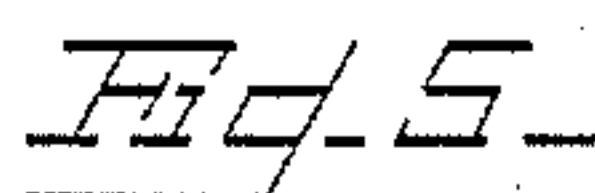
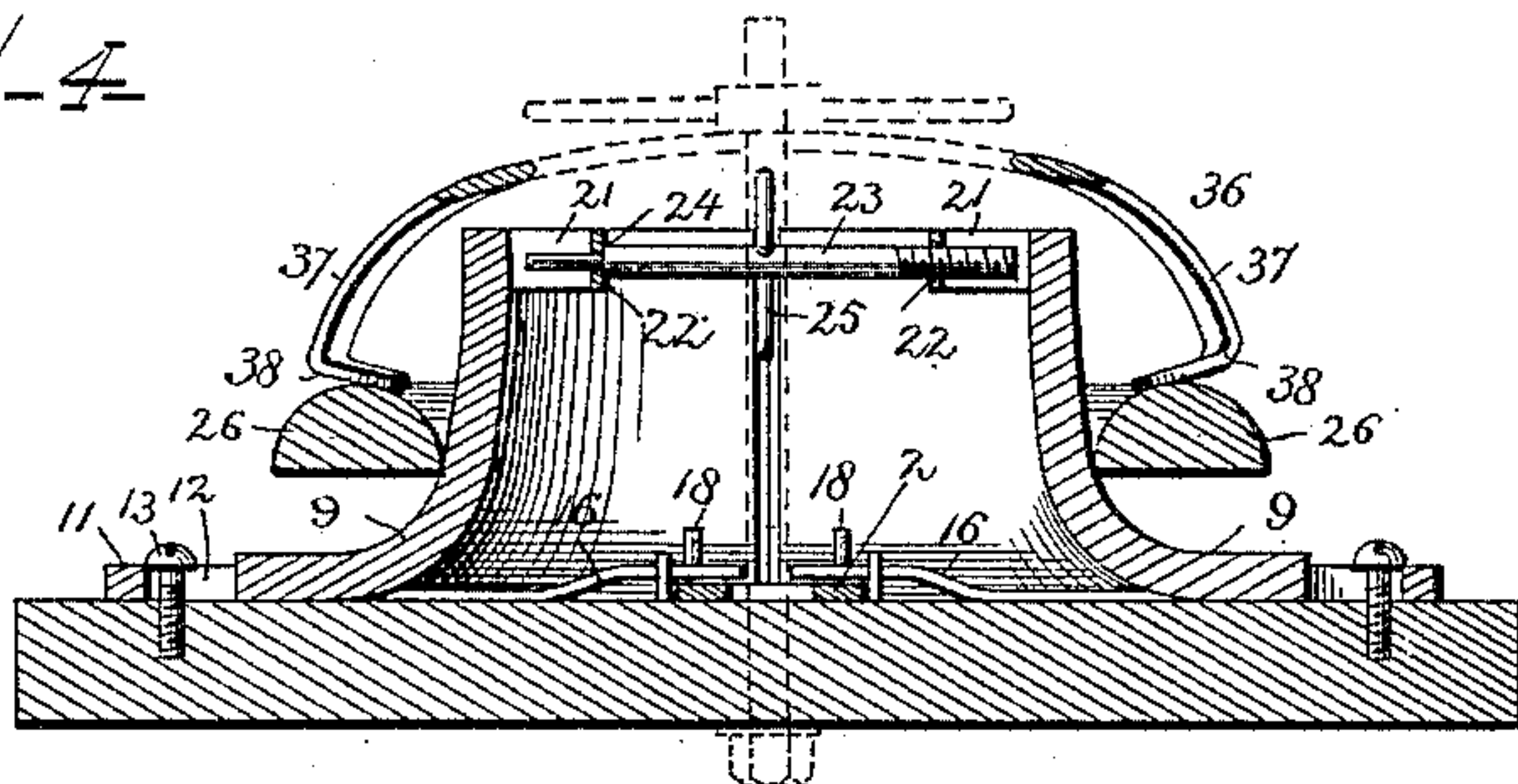
Inventor

Caleb J. McNulty

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# UNITED STATES PATENT OFFICE.

CALEB J. McNULTY, OF SEDALIA, MISSOURI.

## HORSE-COLLAR MACHINE.

SPECIFICATION forming part of Letters Patent No. 442,992, dated December 16, 1890.

Application filed June 23, 1890. Serial No. 356,472. (No model.)

*To all whom it may concern:*

Be it known that I, CALEB J. McNULTY, a citizen of the United States, residing at Sedalia, in the county of Pettis and State of Missouri, have invented a new and useful Machine for Molding and Pressing Horse-Collars, of which the following is a specification.

This invention relates to machines for molding and pressing horse-collars; and it has for its object to construct a machine of this class which shall be simple, durable, and inexpensive, and by means of which collars of various sizes may be quickly and accurately pressed or molded to conform to the exact shape of the hames in connection with which they are to be used.

The invention consists in the improved construction, arrangement, and combination of parts which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a top plan view of my improved horse-collar-molding machine. Fig. 2 is a plan view of the base-board of the machine with several of the parts detached. Fig. 3 is a perspective view of one of the parts or sections of the molding-flange. Fig. 4 is a transverse sectional view taken on the line 4 4 in Fig. 1. Fig. 5 is a longitudinal vertical sectional view taken on the line 5 5 in Fig. 1. Fig. 6 is a bottom view showing the molding-flange detached from the base.

Like numerals of reference indicate like parts in all the figures.

1 designates the base of my improved collar-press and molding-machine, upon which is mounted a central longitudinal slide 2, one end of which is upturned to form a lug 3, having a screw-threaded perforation 4, through which passes the adjusting-screw 5, which is swiveled in a suitable box or bearing 6 at one end of the base-board. The screw 5 has a handle 7, by means of which it may be conveniently manipulated.

8 designates the molding-flange, which is composed of four sections designated, respectively, 9 9 and 10 10, adapted to form, respectively, the upper and lower halves of the collar. The parts of said pieces 9 and 10 are properly shaped, as will be seen in the drawings, so to conform to the configuration of

the inner surface of a horse-collar. The said flange-sections are provided with outwardly-extending lugs 11, having slots 12 to receive the screws or bolts 13, by means of which they are secured upon the base in the required position for operation. The slots in the several lugs are so formed that when the several sections are moved outwardly the upper sections 9 shall be moved laterally only, while the lower sections shall at the same time be guided in a downward direction, the slots 12 in the lugs 11 of said lower sections being formed obliquely, as will be clearly seen by reference to the drawings.

The longitudinally-movable slide is provided at its lower end with a transverse slot 14, adapted to receive lugs or studs 15, projecting downwardly from the ends of the lower sections 10. The upper sections 9 are provided with inwardly-extending brackets 16, provided at their inner ends with oblique slots 17, engaging lugs or studs 18, projecting upwardly from the longitudinally-movable slide 2. It will thus be seen that by operating the slide 2 by means of the screw 5 the several sections of the molding-frame will be forced or spread apart or drawn together, according to the direction in which the screw is rotated.

Stops 19 are arranged upon the base-board near its upper end for the purpose of limiting the movement of the sections of the molding-frame in an upward direction.

The upper sections of the molding-flange are provided with guides 20, attached to their meeting edges, for the purpose of receiving and guiding the meeting edges of the lower sections of said molding-flange. Said guides also serve to cover the outer sides of the joints between the meeting edges of the said sections. The sections 9 9 and 10 10 of the molding-flange are provided on their inner sides with loops or bails 21, having recesses or perforations 22 to receive the ends of the rods 23, which are shouldered, as shown at 24, to abut against the inner sides of the loops or bails 21. Each of the rods 23 is screw-threaded at one end to fit a correspondingly-screw-threaded perforation in the loop or bail which it engages, and each of said rods is provided with a handle 25, by means of



which it may be turned so as to space the sections 9 or 10 with which it is connected any desired distance apart independently of the adjustment by means of the longitudinally-grooved slide 2.

26 designates a presser-frame, which is composed of two correspondingly-shaped halves or sections, which are substantially of the outline of a horse-collar. These sections are hinged together at their lower ends by means of the pins 27, extending through lugs 28, projecting from the sections of the frame 26, and also through a series of perforations 29 in a plate 30, which serves as a hinged plate. The upper ends of the parts of the frame 26 are connected by a transverse bolt 31, provided at its ends with a thumb-nut 32, enabling the said parts to be connected adjustably and separably.

33 designates a post which extends upwardly from the base-board 1. The upper end of said post is screw-threaded and provided with a nut 34, having handles 35, extending in opposite directions, to enable said nut to be conveniently manipulated.

36 designates an elastic frame having outwardly and downwardly extending legs 37, which terminate at their lower ends in feet 38, adapted to rest on the upper side of the presser-frame 26.

In operation the horse-collar, which has been previously stuffed or filled and had its ends joined, is mounted upon the molding-flange of my improved pressing apparatus. I next buckle a pair of hames of the size for which the collar is intended into position upon the said collar, after which the presser-frame 26 is adjusted in position, and the spring-frame is next mounted upon the post 33, after which the nut 34 is screwed down against said spring-frame, forcing the latter and the presser-frame 26 downwardly against the collar with any desired degree of pressure. The sections of the molding-frame are next expanded by operating the screw 5, thus expanding the collar within the ends and causing a perfect fit to be attained. The collar may be left in the press for any desired length of time, after which the spring-frame and presser-frame may be removed by removing the nut 34, thus enabling the collar to be removed, after which the sections of the molding-flange may be restored to their normal condition, and the press is then ready for a repetition of the operation. It will be seen that the sections of the molding-flange may be readily adjusted to fit collars of various sizes. It will furthermore be seen that by the use of my improved press the collars will acquire the exact shape of the hames in connection with which they are to be used, thereby saving much future trouble and annoyance.

The slide 2, as will be seen in the accompanying drawings, is provided with a longitudinal slot to admit the vertical post 33 and

to prevent the latter from interfering with the operation of the device.

While I have in the foregoing described what I consider to be the preferable form of my invention, I desire it to be understood that I reserve the right to any changes and modifications which may be resorted to without departing from the spirit of my invention.

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

1. In a machine of the class described, the combination of the base-board, the longitudinally-movable slide, a screw swiveled in suitable bearings and engaging a screw-threaded perforation in said slide, a molding-flange composed of separable sections having outwardly-extending slotted lugs, bolts or screws extending through said slotted lugs and securing the sections of the molding-flange to the base-board, lugs extending from the upper flange-sections through a transverse slot in the longitudinally-movable slide, and lugs extending from the latter through oblique slots in arms or brackets extending inwardly from the lower flange-sections, substantially as set forth.

2. The combination of the molding-flange composed of separable sections having slotted lugs, the longitudinally-movable slide and operating-screw for the latter, lugs extending from said slide through oblique slots in arms extending inwardly from the lower flange-sections, lugs extending from the upper flange-sections through a transverse slot in said slide, and stops to limit the longitudinal movement of the lower flange-sections, substantially as and for the purpose set forth.

3. In a machine of the class described, the molding-flange composed of the upper and lower sections, each provided on their inner sides with lugs or bails, in combination with the screw-threaded rods connecting the upper and lower sections, respectively, screw-threaded ends of said rods extending into the flange-sections at one side, and the opposite ends of said rods being shouldered to engage perforations in the bails of the opposite sections, said rods being provided with handles, substantially as and for the purpose set forth.

4. In a machine of the class described, the molding-flange composed of separable sections constructed as described, in combination with mechanism for simultaneously expanding the several sections longitudinally and transversely and independent mechanism for expanding the opposite side sections laterally, substantially as and for the purpose set forth.

5. In a machine of the class described, the combination of the base-board, the molding-flange, mechanism for expanding the sections of said flange simultaneously outwardly, a presser-frame, and a spring-frame for forcing the latter downwardly upon the molding-



flange, substantially as and for the purpose set forth.

6. In a machine of the class described, the combination of the molding-flange constructed of separable sections, mechanism for simultaneously expanding the sections of said molding-flange outwardly, the presser-frame, a bolt or post extending upwardly from the base, a spring-frame mounted on said post and adapted to bear against the presser-frame, and a nut to force the said spring-frame downwardly against the presser-frame, substantially as set forth.

7. A machine for pressing or molding horse-collars, comprising, essentially, a base-board, a molding-flange composed of four separable sections having slotted lugs to receive screws or bolts by means of which they are mounted upon the base-board, mechanism, substantially as described, for simultaneously expanding the sections of the molding-flange outwardly, independent mechanism for forcing the side sections of the molding-flange in

opposite directions, a presser-frame composed of two adjustably-connected sections adapted to be mounted upon the molding-flange, a spring-frame to bear against said presser-frame, and mechanism for forcing the said spring-frame downwardly against the presser-frame, substantially as set forth.

8. In a machine of the class described, the combination, with the expansible molding-flange and the presser-frame, of the spring-frame having downwardly and outwardly extending legs terminating in feet adapted to bear against the presser-frame, and mechanism for forcing the said spring-frame downwardly against the presser-frame, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CALEB J. McNULTY.

Witnesses:

WILSON A. FAST,  
REXFORD RHODES.