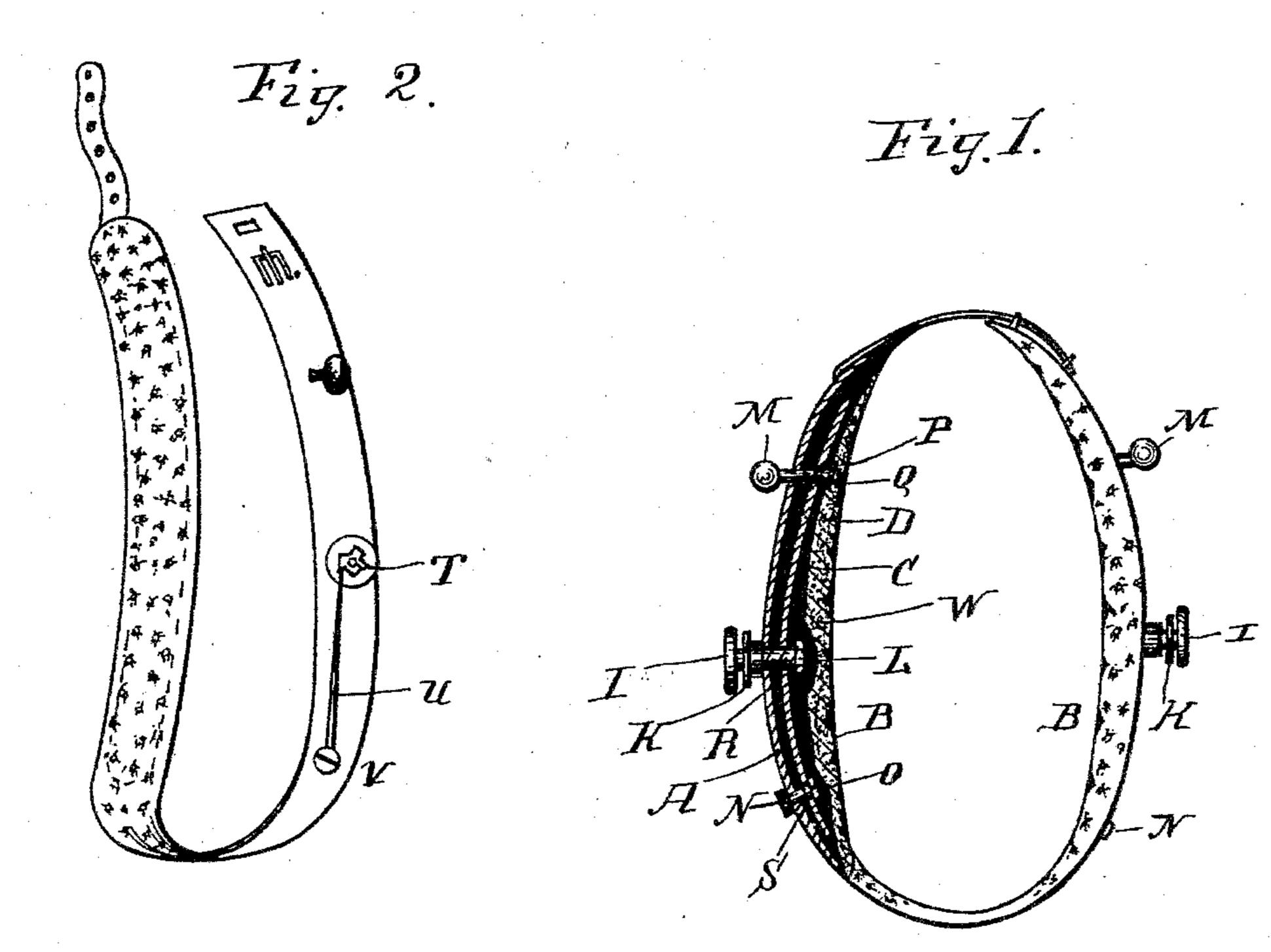
(No Model.)

J. LIPP.

COMBINED COLLAR AND BREAST STRAP.

No. 412,193.

Patented Oct. 1, 1889.



WIINESSES

CG Pael.

Glin Belt.

INVENTOR

Jacob Lipp.

By C. Sampbell

Attorney

## United States Patent Office.

JACOB LIPP, OF DE GRAFF, OHIO, ASSIGNOR OF ONE-HALF TO WILBER L. SMITH, OF SAME PLACE.

## COMBINED COLLAR AND BREAST-STRAP.

SPECIFICATION forming part of Letters Patent No. 412,193, dated October 1, 1889.

Application filed March 9, 1889. Serial No. 302,737. (No model.)

To all whom it may concern:

Be it known that I, JACOB LIPP, a citizen of the United States, and a resident of De Graff, in the county of Logan and State of Ohio, 5 have invented a new and useful Horse Collar and Breast-Strap, of which the following is a specification.

My invention relates to improvements in

collars and breast-harness.

Fig. 1 is a side view with one-half shown in section; Fig. 2, a side perspective with inner

steel plate shown in dotted lines.

My invention is designed to furnish a light collar for carriage use. The present heavy collars and harness are unsightly, and on heavy roads, or where one horse is used to a

carriage, breast-harness is too light.

To take the place of the ordinary collar and harness or breast-harness, I make my collar of 20 the shape shown, having an outside piece A, of heavy leather, with a securing-piece C, of thinner leather, sewed onto its under side. To these is sewed the inside piece B, that rests upon the horse's neck and shoulders. Be-25 tween the pieces A C is inserted a light steel plate D, curved to suit the shape of the collar, and having holes QRS through it. The outside leather piece A also has holes through it opposite the holes in the steel plate. Through 30 these holes is inserted the shank of a button I, having a screw-thread on the end of the shank, which passes through the holes in the plate and is secured by nut L. On the part of the shank extending outside of the collar, and be-35 tween the collar and the button, is a flanged thimble K, playing loosely on the shank. This thimble can be left off and the trace fastened on the shank of the button; but in practice I prefer to use the thimble to prevent 40 the liability of the button turning. The upper ends of the plates are held in position by the turrets MM, passing through holes Q, and secured by a nut, while the lower ends are

similarly held by the nickel-plated nuts N N, passing through holes S, and secured by nuts 45 O. The space between the inside leather piece B and the securing-piece C is stuffed with hair W in the usual manner.

In operation, the button I is unscrewed, and it and the thimble K passed through a hole 50 in the end of the tug. The shank of the button is again passed through the plate and screwed into the nut L, held in position by the leather strip C, sewed around the plate D, and fast to the outside piece A. As the tug works 55 around in different positions while the horse is traveling, the thimble K revolves on the shank and prevents the button being unscrewed. For further security, I formaratchet T on the head of the button and fasten the 60 spring-pawl U to the collar by bolt V. I am thus enabled to make a light and elegant collar, doing away with the extra hames, and making a smooth and much neater collar than the old style, and one adapted for buggy and 65 carriage use.

What I claim is—

1. In a horse collar or breast-strap, the leather covering, the inside pad, the trace-button, the inside plate, and the thimble K, 70 as and for the purpose set forth.

2. In a horse-collar, an inside plate having secured thereto the detachable trace-button I, thimble K, and a locking device for keeping the button from turning, as and for the 75

purpose set forth.

3. The combination of a horse-collar having the inner plate D, and detachable button I, having thimble K thereon, with the ratchet T, pawl U, and fastening N, as and for the 80 purpose set forth.

JACOB LIPP.

Witnesses:

NED CAMPBELL, E. K. CAMPBELL.