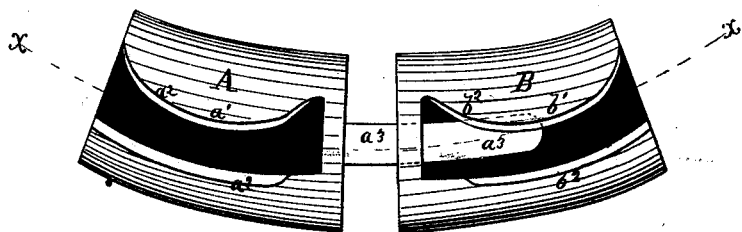


J. P. SCHMITZ & H. W. COOPER.  
Horse-Collar Clamp.

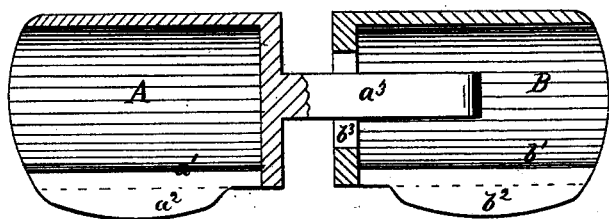
No. 206,043.

Patented July 16, 1878.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*Henry W. Miller*  
*C. Sedgwick*

INVENTOR:

*J. P. Schmitz*  
*H. W. Cooper*  
BY *Mumford*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOSEPH P. SCHMITZ AND HERBERT W. COOPER, OF WINONA, MINNESOTA.

## IMPROVEMENT IN HORSE-COLLAR CLAMPS.

Specification forming part of Letters Patent No. **206,043**, dated July 16, 1878; application filed June 4, 1878.

*To all whom it may concern:*

Be it known that we, JOSEPH P. SCHMITZ and HERBERT W. COOPER, of Winona, in the county of Winona and State of Minnesota, have invented a new and useful Improvement in Horse-Collar Clamps, of which the following is a specification:

Figure 1 is a side view of our improved clamp. Fig. 2 is a longitudinal section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved clamp for connecting the lower ends of the parts of a horse-collar in such a way that they may have a movement upon each other to accommodate themselves to the movements of the shoulders of the horse in walking, and which shall be so constructed as to enable the collar to be readily adjusted in size to correspond with the size of the horse's neck, and which shall be simple in construction and convenient and reliable in use.

The invention consists in a collar-clamp for horses' collars, formed by the combination, with each other, of the socket provided with the flanged slot in its side, and a square curved pin upon its end, and the socket provided with the flanged slot in its side and the rectangular slot in its end, said slot being made of a greater length horizontally than the breadth of the pin, as hereinafter fully described.

A and B represent the two sockets, which are made of such a size and shape as to fit upon the lower ends of the rim of a horse's collar. In the side of the sockets A B are formed slots  $a^1 b^1$ , to receive the seam that connects the rim with the belly of the collar. Upon the sockets A B, along the slots  $a^1 b^1$ , are formed flanges  $a^2 b^2$ , to prevent the edges of the said sockets from cutting the leather of

the collar. To the end of the socket A is attached, or upon it is formed, a curved pin,  $a^3$ , which is made square in its cross-section, and passes through a slot,  $b^3$ , in the end of the other socket, B. The slot  $b^3$  is made of a depth equal to the thickness of the pin  $a^3$ , and of a length considerably more than the breadth of the said pin  $a^3$ , so that the ends of the sockets A and B may have a horizontal movement upon each other, to allow the collar to accommodate itself to the movements of the horse's shoulders in walking.

This flexibility of the connection of the lower end of the collar makes the said collar much easier upon the horse, and less liable to chafe or gall his shoulders.

With this construction, also, by placing washers of leather or other suitable material upon the pin  $a^3$ , between the ends of the sockets A B, the collar may be increased in size to adjust it for use upon a horse with a larger neck, the pin  $a^3$  being made of such a length as to enable this to be done without affecting the connection between the two sockets.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

In a clamp for horse-collars, the combination of the socket A, provided with the flanged slot  $a^1 a^2$  in its side, and a square curved pin,  $a^3$ , upon its end, and the socket B, provided with the flanged slot  $b^1 b^2$  in its side and the rectangular slot  $b^3$  in its end, said slot  $b^3$  being made of a greater length horizontally than the breadth of the pin  $a^3$ , substantially as herein shown and described.

JOSEPH PETER SCHMITZ.

HERBERT WARREN COOPER.

Witnesses:

WM. LUDKE,  
JOHN MAIER.