No. 839,809. PATENTED JAN. 1, 1907.

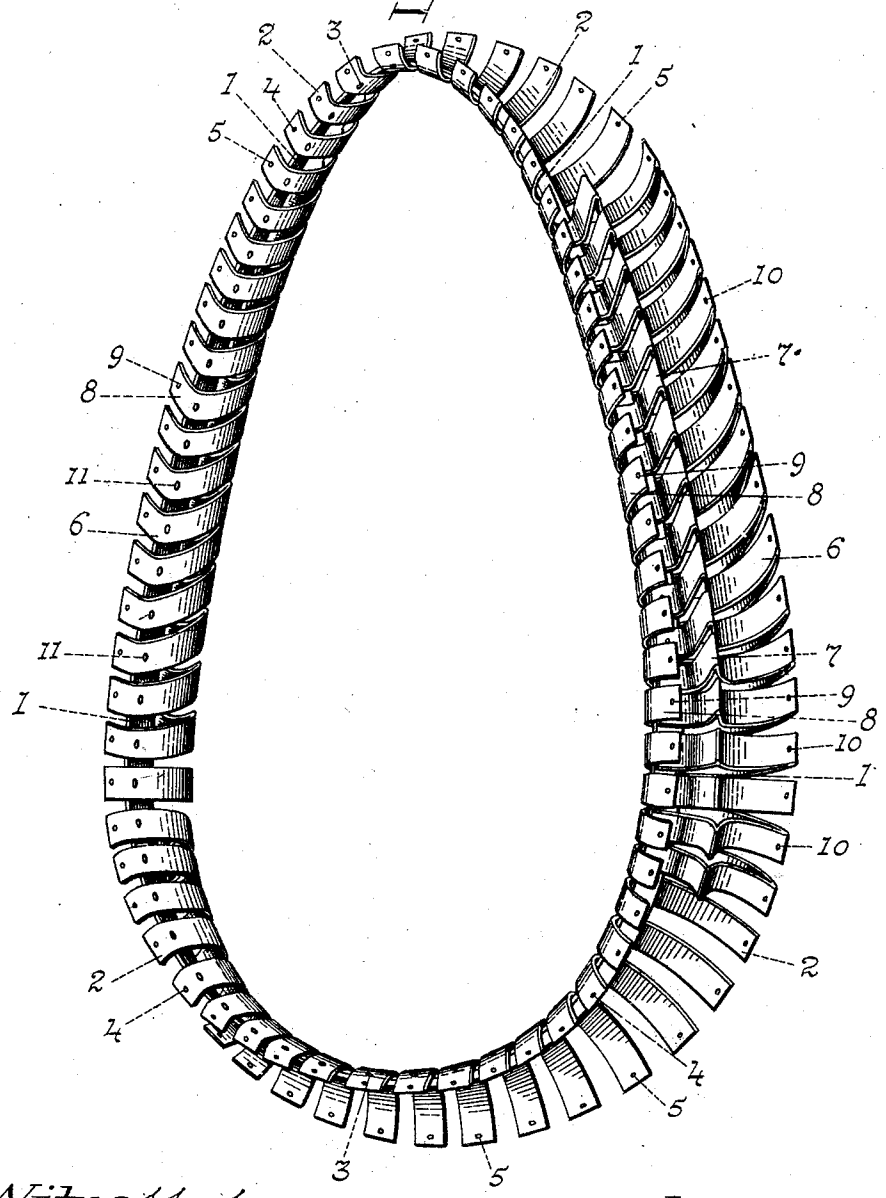
R. E. CADY.

HORSE COLLAR.

APPLICATION FILED JUNE 5, 1905.

2 SHEETS—SHEET 1.

Fig. 1.



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2 SHEETS—SHEET 2.

Fig. 2.

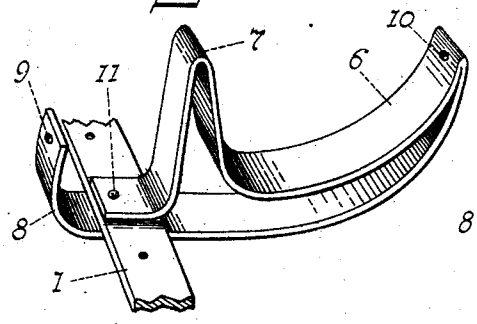


Fig. 3.

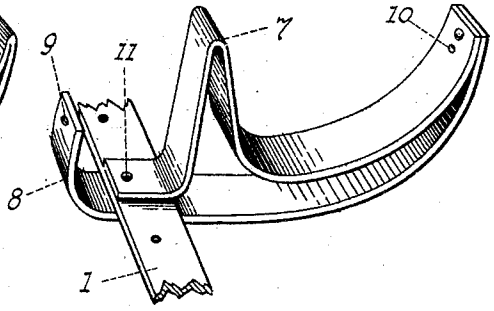


Fig. 4.

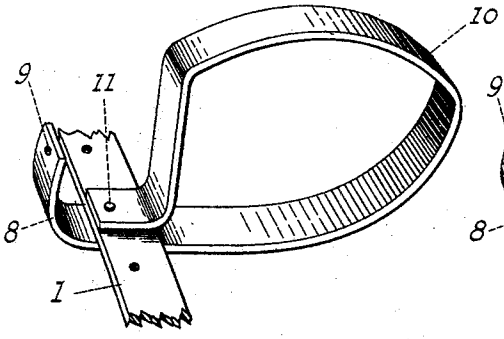


Fig. 5.

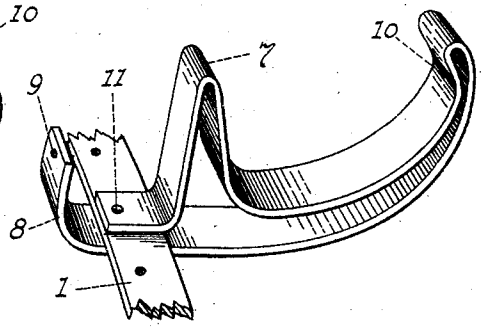
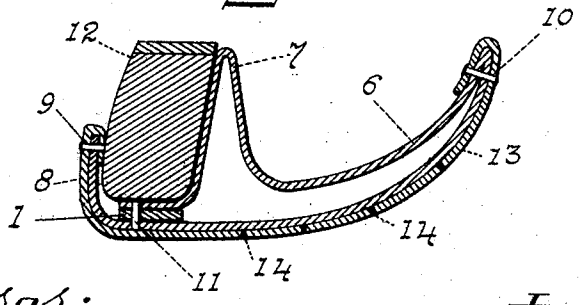


Fig. 6.



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UNITED STATES PATENT OFFICE.

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HORSE-COLLAR.

No. 839,809. Specification of Letters Patent. Patented Jan. 1, 1907.

Application filed June 5, 1905. Serial No. 263,796.

To all whom it may concern:

Be it known that I, RALPH ELWIN CADY, a citizen of the United States, residing at Auburn, in the county of Cayuga and State of New York, have invented new and useful Improvements in Horse-Collars, of which the following is a specification.

My invention relates to horse-collars formed of a series of pieces of metal or other material which are held in desired position relative each to the other on a frame or band provided for the purpose and so arranged as to give the horse-collar its desired form and resiliency; and the object of my improvement is to provide in a portion of the series of pieces referred to means for holding or retaining the hames usually carried thereon in working position and place without interfering with their proper resiliency.

The improvement will be more readily understood by referring to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a horse-collar such as has been referred to with the improvement shown thereon. Fig. 2 is a perspective view of the improvement detached from the collar and shown formed of a single piece of material. Fig. 3 is a perspective view of the same also detached, but formed of two pieces of material. Figs. 4 and 5 are perspective views showing modified forms of the improvement, and Fig. 6 is a longitudinal section of the improvement with a section of one of the hames in place and the usual covering thereon.

Similar figures of reference refer to similar parts in the several views.

By referring to Fig. 1 it will be seen I have selected a type of horse-collar with my improvement thereon in which strips of metal or other suitable material are turned up at their ends and securely fastened to a band, the whole when properly spaced and arranged forming the shape and pattern of the said collar. It should be understood I have selected this type of horse-collar on which to show my improvement as best fitted to illustrate its efficiency and its utility, although it may not necessarily be confined to it, for it will be evident the improvement may be used in other styles and types of horse-collars if found desirable.

In Fig. 1 a collar-band 1 is shown which may be arranged to open at its top end and is made of the general form and shape shown. On it at suitable positions and spaces on the top and bottom ends are secured the strips 2 by suitable rivets 3. It will be seen the said strips 2 are secured on the under side of said band 1 near one end, which for convenience may be called the "forward" end, which is upwardly turned, as seen, and provided with a hole 4 for attaching a covering, which latter is shown in section in Fig. 6 at 13. The other or rearward ends of said strips 2, which when the whole is arranged together bear against the neck or shoulders of the horse, are upwardly curved in such manner as to form resilient springs, and the said ends are provided with a hole 5 for fastening the covering of the collar thereto, as has been mentioned. The object of the said covering, which for obvious reasons is not shown in Fig. 1, is to cover the whole of the bearing-surface of the collar, thus rendering it smooth and not liable to gall or abrade the skin on the neck and shoulders of the horse. The several strips carried on the collar-band are arranged with a suitable space between them, and the said covering 13 (see Fig. 6) is provided with holes 14 over the said spaces which admit of ventilation for the collar when its several parts are assembled and it is in use.

Between the top and bottom series of strips attached to the collar-band, as has been referred to, is also fastened to said collar-band on either side of the collar a series of strips 6, suitably spaced, of unique form and design, which embody the main features of my improvement and which I will proceed to describe.

Referring to Fig. 1, it will be observed the said strips 6 are secured on the collar-band in such place and position as to receive and sustain in working place the hames of said collar and also to receive and relieve such strain and shock of draft or otherwise as may be brought to bear on said hames when the horse wearing the collar is pulling on a load. The position of the hame on the said strips 6 may be clearly seen in Fig. 6 at 12.

It may be explained that the individual members of the series about to be described may vary somewhat in their extreme length from point to point in order that they may properly conform to the shape and contour of the horse-collar.

Referring to Fig. 2, a clearer conception of the structure of one of the said intermediate

strips 6 will be had. The said strip 6, it will be observed, is turned or doubled on itself in such a manner as to afford a resilient upward projection or loop 7 between its outer and its inner end, as shown, the object of which will be presently explained. The inner end 8 of the said strip 6 is upwardly turned and is provided with a hole 9, by means of which the covering of the collar is fastened thereto. The outer end of the said strip 6 where it is doubled on itself is upwardly turned in a curved shape, as shown, so as to afford resilience at this point, which bears against the shoulder of the animal, and it also is provided with a hole 10 for securing the covering of the collar. From the said resilient upward projection or loop 7 the strip is continued on to the upper side of the collar-band 1, where a rivet 11 or other suitable fastening passes through it (the collar-band) and near the opposite end of said strip, and it is thus secured in desired position, as plainly seen in Figs. 1, 2, and 3, the same arrangement and formation, as well as the fastening, being applied to the individual members comprising the intermediate series of strips at either side of the horse-collar. In this novel construction it will be observed when the said intermediate series of strips is arranged on the collar-band a channel is afforded in which the hame is carried, the resilient upward projections or loops 7 affording a rest for the side of the hame, which is thus assured of resiliency against the said loops 7 in the act of pulling and is also further assured of a stop on its opposite side or forwardly by the upwardly-turned end of said intermediate strips 6, as has been described and is shown in Fig. 6. Besides this, resiliency is afforded by the upwardly-curved rearward ends of said intermediate strips 6 where they bear against the shoulders of the animal, which, in conjunction with the resiliency of the upward projections or loops 7, as already mentioned, reduces the shock in pulling or tugging to its minimum point.

By referring to Fig. 3 it will be observed I show the same structure of intermediate strips, except that the upper portion of the same is in one part and the lower portion in another part, the two pieces being riveted together at the outward end, as shown, and provided with a hole for fastening the collar-covering.

It will be evident that there may be various methods and modifications in the turning of the upper part of the said intermediate strips which have been described and two of which are seen in Figs. 4 and 5. In the former modified form the upper portion is curved upwardly between the outer point and the rest 7 and in the latter a loop is formed at the outer end in the manner shown. Such modifications, however, do not practically affect or interfere with the main factors of my invention and I have simply shown them that it may be seen I am aware of the many and varied modifications that may be made. In Fig. 6 the hame is seen at 12 and the covering for the collar is shown at 13.

I am aware that horse-collars have been made and used having a collar-band with resilient strips fastened thereon; but I am not aware that said resilient strips turned into a resilient projection or loop for the hame of the collar to pull against have ever been known or used.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In a horse-collar a strip or strips of resilient metal or other material turned upwardly at one end and adapted to form a hame-stop and bent midwise or near the opposite end over itself and thence turned into an upwardly-projecting resilient loop adapted to form a hame-rest and secured to a collar-band practically in the manner and for the purpose herein described and shown.

2. In a horse-collar a strip or strips of resilient metal or other material with one end adapted to form a hame-stop provided with a hole and upwardly bent at the outer end and midwise on itself and thence turned in an upward loop adapted to form a hame-rest provided with a hole at said outer end and secured to a collar-band substantially in the manner and for the purpose herein described and shown.

3. In a horse-collar a strip or strips of resilient metal or other material having one end upwardly turned and adapted to form a hame-stop and provided with a hole, and upwardly bent and turned midwise on itself and provided with a hole and thence continued and bent into an upward loop adapted to form a hame-rest combined with a collar-band and a strip or strips of resilient metal or other material having one end or ends upwardly turned and provided with a hole and the other end or ends upwardly curved and provided with a hole substantially secured on said collar-band in the manner and for the purpose herein shown and described.

In testimony whereof I affix my signature in presence of two subscribing witnesses.

RALPH ELWIN CADY.

Witnesses:
HORACE G. CADY,
FRANK. R. RATHBUN.