

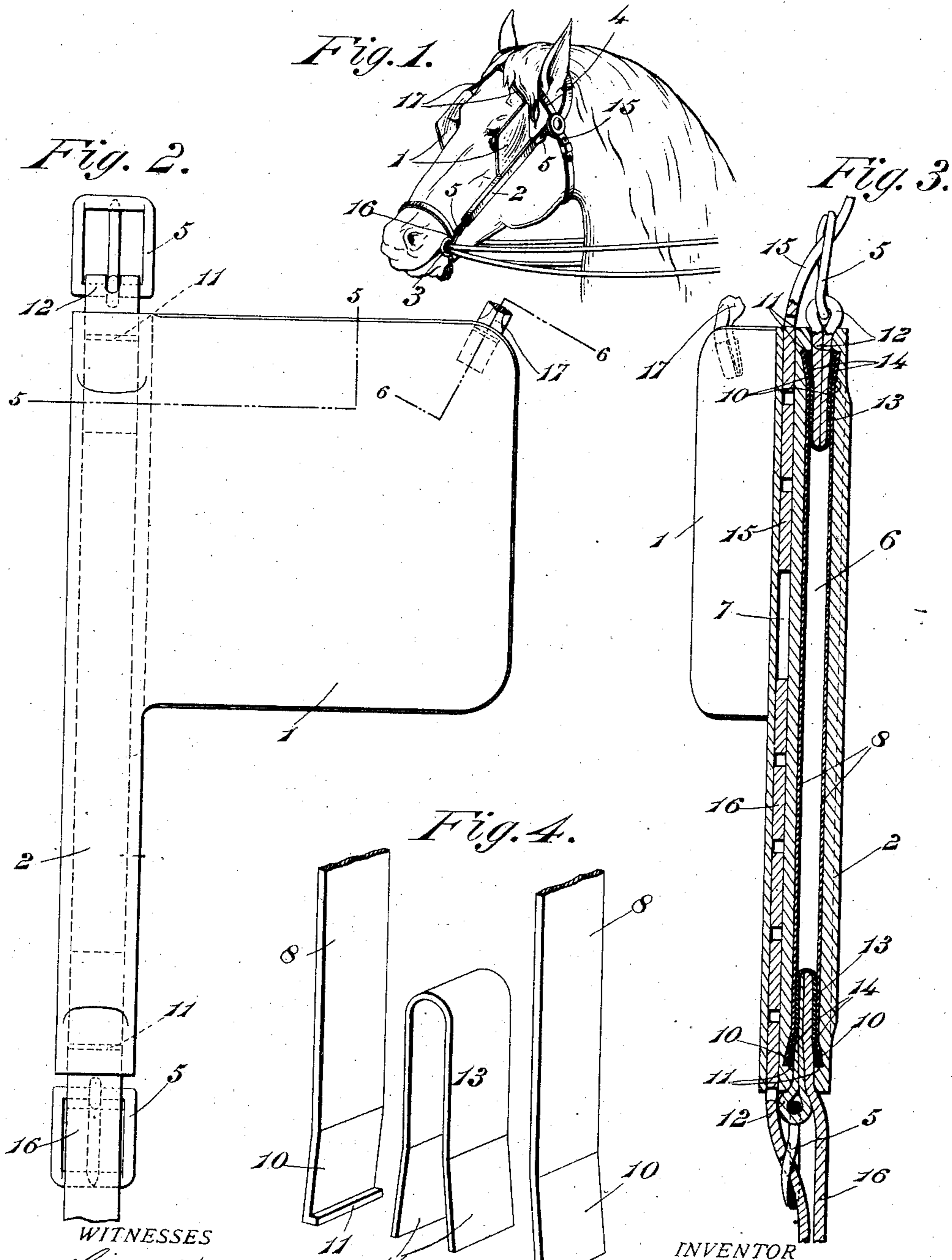
No. 883,287.

PATENTED MAR. 31, 1908.

W. L. BUEGER.
WINKER BLIND.

APPLICATION FILED FEB. 6, 1906.

2 SHEETS—SHEET 1.



WITNESSES
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2 SHEETS—SHEET 2.

Fig. 5.

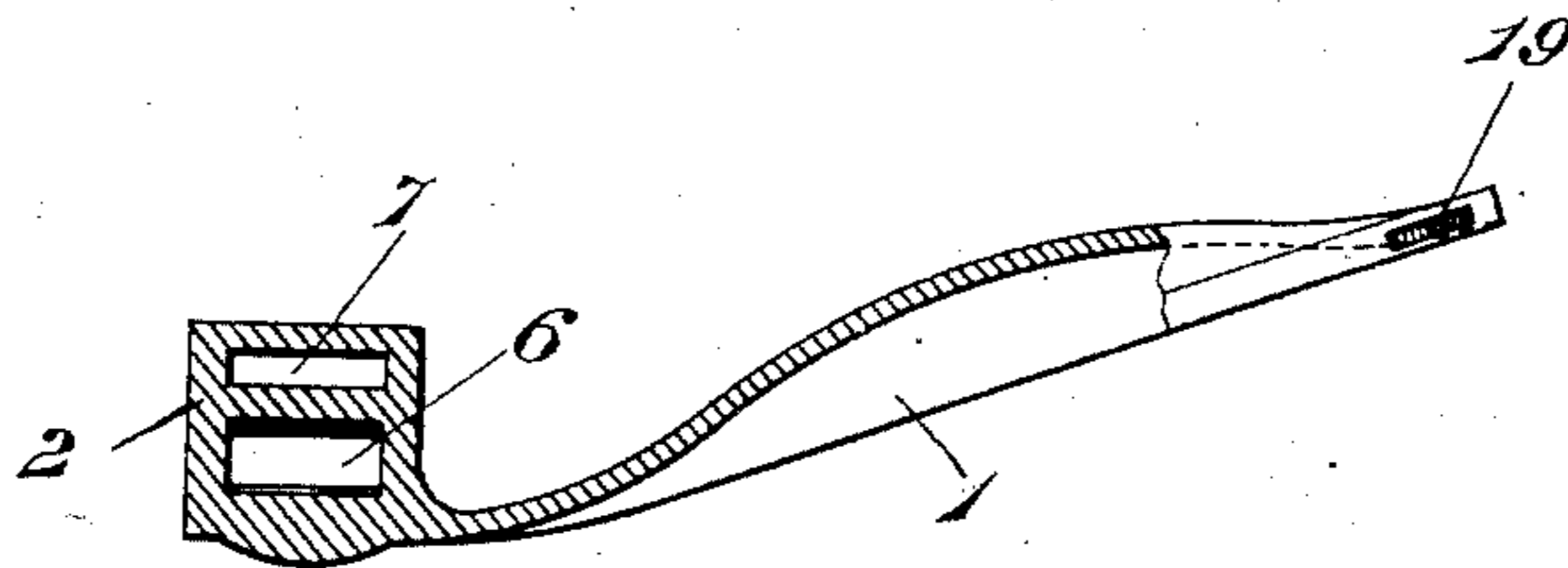


Fig. 6.

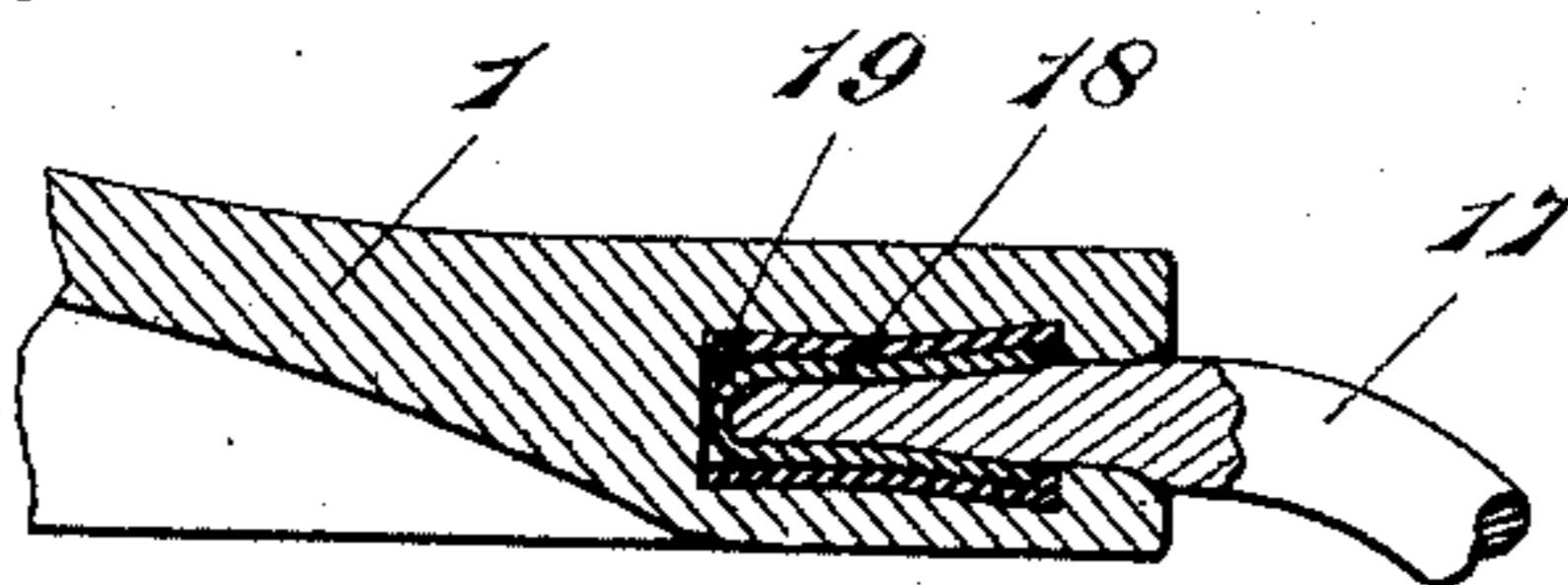
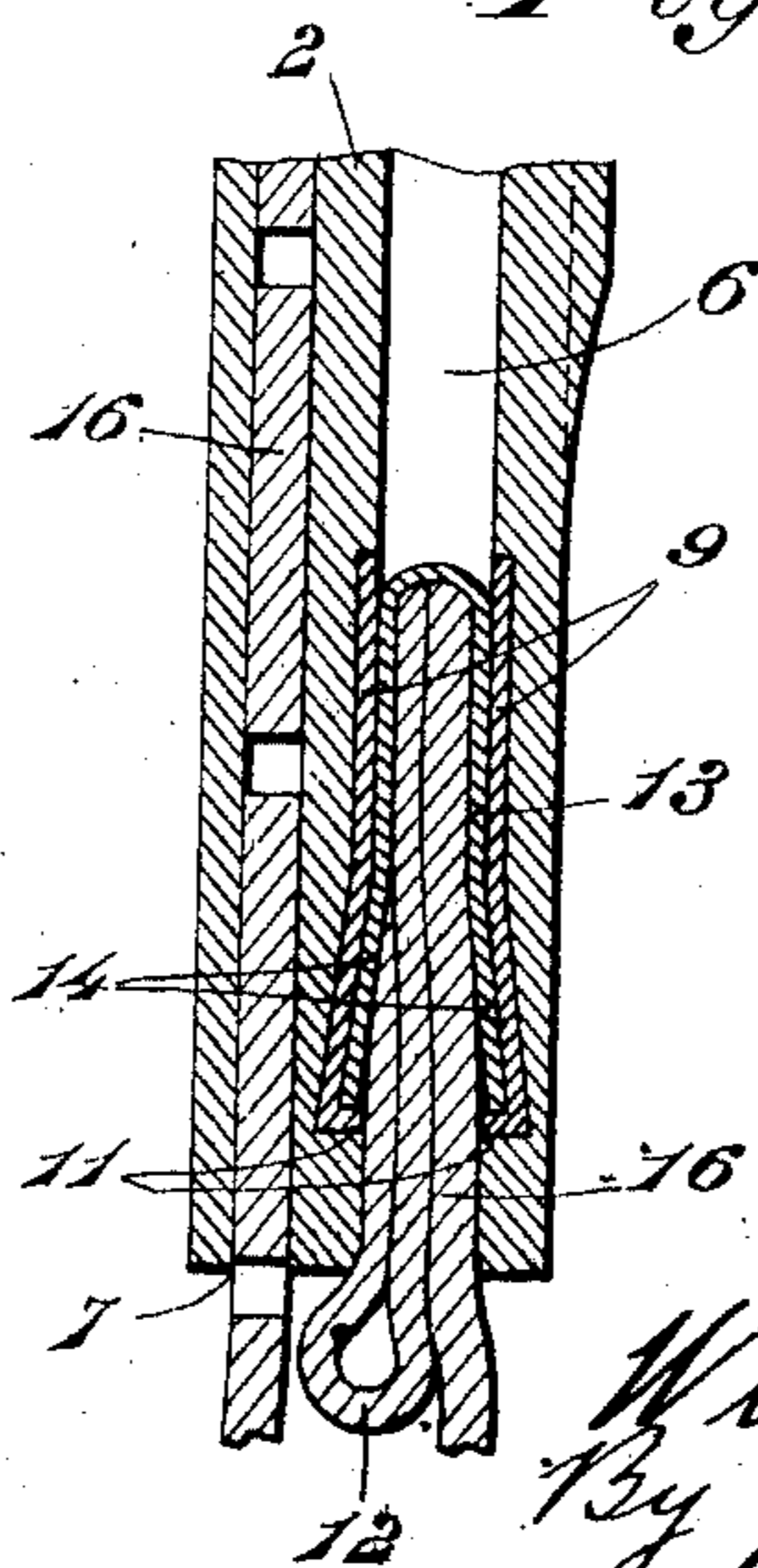


Fig. 7.



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UNITED STATES PATENT OFFICE.

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WINKER-BLIND.

No. 883,287.

Specification of Letters Patent.

Patented March 31, 1908.

Application filed February 6, 1906. Serial No. 299,812.

To all whom it may concern:

Be it known that I, WILLIAM L. BUERGER, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Winker-Blinds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to bridles, and it comprises, firstly, an improved winker-blind and cheek-piece made as an integral article from a suitable moldable material and with an embedded metallic lining or linings in the socketed end or ends of the cheek-piece, as and for the purposes hereinafter described and pointed out in the claims.

The invention further comprises an improved means of incorporating the article in the bridle, or attaching thereto the buckle-straps or keepers, so as to enable the harness-maker, when filling an order for a particular description of harness, to supply whatever style of buckles or other fastenings that may be demanded.

The invention will hereinafter be fully described with reference to the accompanying drawings, which form a part of this specification, and then more particularly pointed out and defined in the appended claims.

In said drawings, Figure 1 shows a horse's head equipped with a bridle having integral winker-blinds and cheek-pieces embodying my invention. Fig. 2 is an enlarged elevation of one of the winker-blinds and cheek-pieces, looking at the under or inner side of the blind. Fig. 3 is a section taken longitudinally of the cheek-piece. Fig. 4 is an enlarged detail view showing certain unassembled parts, hereinafter referred to. Fig. 5 is an enlarged section on line 5—5 of Fig. 2. Fig. 6 is an enlarged section on line 6—6 of Fig. 2. Fig. 7 is a fragmentary section similar to Fig. 3, showing only the lower end portion of the cheek-piece, and illustrating a modification.

Referring to the drawings, the winker-blind 1 and the cheek-piece 2, as shown, are formed in one integral structure, from suitable material which is capable of being molded or compressed and adapted for the requirements of usage or service. A preferred material for this purpose consists of a

fabric interior, of one or more layers of fabric saturated and covered with a compound of vulcanized or hard rubber, such material being produced by applying the rubber compound, consisting of india rubber and sulfur, to the surface of the fabric and passing the same between steam heated rolls; the compound being thinned or softened temporarily by the heat and forced through the fabric by compression of the rolls; or a plurality of sheets of fabric may be treated in like manner and united by heat and pressure into a homogeneous mass; in either event giving a product consisting of a fabric thoroughly saturated or incorporated with the hard rubber compound and also having an outer covering or coating of the same, such product having strength and durability not possessed by hard rubber alone and also being lighter and cheaper.

I do not of course confine myself to the particular material above described, it being understood that the article may be formed of any material or substance suitable for molding, stamping or pressing into shape and adapted to meet the requirements of service.

The blind 1 is of ordinary form, extending forward from the elongated cheek-piece 2, which corresponds to the leather cheek-strap of ordinary bridles, being adapted for attachment to the bit 3 and crown-piece 4 and shown provided with buckles 5 for that purpose, said buckles being attached by the improved devices hereinafter described. The cheek-piece 2 is in the form of a double sleeve, having a narrow longitudinal passage or pocket 6, and a similar but preferably somewhat narrower passage or pocket 7, the latter occupying preferably an outer position and the passage 6 occupying an under or inner position when the bridle including this article is fitted on the horse's head. The passage 6 may be lined with opposite sheet-metal strips 8, as shown in Fig. 3; or instead of these elongated strips, short sheet-metal strips or pieces 9 may be embedded in the confronting walls of the passage, as shown in Fig. 7. The end portions of the said strips 8, or of the shorter strips 9, as the case may be, may be bent slightly outward so as to diverge, as at 10, and their extremities are formed with inwardly projecting shoulders, ribs or flanges 11. The blind and cheek-piece may be formed of the desired material by compressing or molding the same around

suitable mandrels or cores of the desired length and width to form the pockets 6 and 7, which preferably extend the entire length of the cheek-piece, though, as stated, either 5 or both may extend only part way thereof, by providing suitable mandrels of the desired length.

In molding the article the mandrel or core for forming the passage or pocket 6 has 10 placed thereagainst the sheet-metal strips 8 around which the material is worked or built up, in such manner that when the mandrel or core is removed the strips will be firmly embedded in and form practically an 15 integral part of the structure. In like manner when a shorter mandrel is used the strips 9, Fig. 7, will be similarly embedded in the material of the article, such material being molded and shaped around the article into 20 the desired form for the complete structure, and the mandrels or cores being thereupon removed. The buckles 5 are shown attached to leather or other suitable flexible loops or keepers 12, each of which is preferably se- 25 curely affixed in or straddled by a U-shaped spring-clip or resilient doubled sheet-metal strip 13; the arms of said clip 13 having outwardly spread or divergent portions 14 similar to the divergent end portions of the 30 strips. These spring-clips 13, with the loops or keepers 12 of the buckles affixed therein, are inserted into the ends of the passage 6 until the extremities of the clips snap past the flanges 11 of the sheet-metal lining strips, 35 8 or 9, whereupon the end portions of the clips spread apart under or behind the aforesaid flanges 11, thereby securing the clips in place in the ends of the cheek-piece 2.

It will be understood that other suitable 40 fastening means may be employed for attaching the buckles, loops or keepers to the cheek-piece, and furthermore, that it is not necessary that the passage or pocket 6 should extend the whole length of the cheek-piece, 45 it being only necessary to provide suitable fastening means, and instead of passages or pockets extending the full length of the cheek-piece suitable sockets may be provided in the ends thereof with interior locking 50 devices or lining strips, such as shown in Fig. 7, for attaching the buckles, though in manufacture it is a simple matter and more expedient to form the passage by means of a mandrel or core extending the entire length 55 of the cheek-piece. At the upper end of the cheek-piece, in Fig. 3, simply a loop or keeper 12 is shown holding the buckle 5, by means of which the upper end of the cheek-piece is buckled to the strap 15 running to the crown-piece 4. But at the lower end of the cheek- 60 piece, the loop or keeper 12 for the lower buckle is shown seated in its clip 13 together with one end of the lower strap 16 which passes through the bit-ring, said loop, clip 65 and strap being riveted or otherwise secured

together. This lower strap 16 is shown buckled to the lower buckle 5, and the free end of the strap is inserted or passed up into the lower end of the passage 7. Likewise the free end of the upper strap 15 is inserted or 70 passed down into the upper end of said passage 7. This explains the function of the passage 7, which is a box-loop to receive in its opposite ends the free ends of the bridle straps 15 and 16. The front portions of the 75 blinds are shown connected by the winker-stays 17, whose ends are attached in spring-clips 18 affixed in sheet-metal lined sockets 19 in the edges of the blinds, these clips and sockets being of like construction to that 80 already described with reference to the ends of the cheek-piece. By these devices, the cheek-piece with its integral blinder is associated with the winker-stays in such manner as to give the appearance of an integral 85 structure, making a neat, durable and efficient construction, fulfilling the objects primarily stated, and preventing the annoying flapping of the blinds, which so often dis- 90 tresses an animal, the flapping being prevented by the stiffness of the material and the character of its attachment or incorporation in the bridle.

The hereinbefore described means for attaching the straps or keepers 12 of the 95 buckles 5 to the cheek-piece, by means of the clips 13 carried by one part engaging in the catches 11 carried by the other part, constitutes a material improvement over those prior devices of this character wherein the 100 keepers of the buckles are molded or otherwise permanently incorporated in the article; this being a serious objection because a variety of buckles are used with cheeked winker-blinds. By virtue of the improvement re- 105 ferred to, any style of buckle or other kind of fastener can be secured in the socket in the end of the cheek-piece; so that the article can be supplied to the trade, that is to harness manufacturers without buckles, and the har- 110 ness-maker when filling an order for a certain harness can attach any particular style of buckle or other fastening demanded.

Having thus fully described my invention, what I claim as new and desire to secure by 115 Letters Patent of the United States is:—

1. A molded cheek-piece having a socket with an embedded metallic lining therein, the material of the cheek-piece being formed or molded exteriorly on said lining, and a 120 buckle-strap or keeper having on its end a metallic cap adapted to enter said socket, the cap and lining constituting a strap-fastening whereby the cap when inserted into said socket is permanently retained therein 125 by engagement with said lining.

2. As a new article of manufacture, an integral winker-blind and cheek-piece mold- 130 ed in one piece from suitable moldable material and with sockets in the ends of the cheek-

piece provided with embedded metallic linings around which the material of the cheek-piece is molded, said linings being constructed to engage with fastenings for buckle-straps or keepers.

3. A molded cheek-piece having a socketed end and metal strips lining the same, the material of the cheek-piece being molded or formed around said strips, leaving the latter embedded in the material.

4. A unitary article comprising a cheek-piece and winker-blind rigid therewith, the cheek-piece having sockets in its ends, doubled or U-shaped spring-clips adapted to hold the straps or keepers of fastening devices, and the sockets in the ends of said cheek-piece being formed to engage and retain said spring-clips when the latter are inserted therein.

5. A unitary article comprising a cheek-piece and winker-blind, the cheek-piece having end sockets, sheet-metal linings in said sockets having inwardly-projecting abutments, and spring-clips adapted to hold fastenings for incorporating the article in a bridle and for insertion into said sockets to engage behind said abutments.

6. A unitary article for incorporation in a bridle comprising a stiff cheek-piece and winker-blind rigid therewith, the cheek-piece having end sockets and opposite sheet-metal pieces in said sockets having divergent end portions with inwardly-projecting flanges or abutments at their extremities; spring-

clips for connection with suitable fastenings inserted into said sockets and sprung past and engaging said abutments for retaining the clips in said sockets.

7. A unitary article for incorporation in a bridle comprising a stiff cheek-piece and winker-blind rigid therewith, the cheek-piece having end sockets and opposite sheet-metal pieces in said sockets having divergent end portions with inwardly-projecting flanges or abutments at their extremities; spring-clips for connection with suitable fastenings inserted into said sockets and sprung past and engaging said abutments for retaining the clips in said sockets, said cheek-piece also having other sockets beside said first named sockets to receive the free ends of bridle straps engaged by said fastenings.

8. An article for incorporation in a bridle comprising a cheek-piece and winker-blind rigid therewith, the winker-blind having a socket with a metal lining, said metal lining having inwardly projecting abutments, a winker-stay, and a spring-clip in which the end of said winker-stay is secured, said spring being inserted in said socket and interlocked therewith by engagement behind said abutments.

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

WILLIAM L. BUERGER.

Witnesses:

EDWARD B. McCONNELL,

ELMER E. HOLTER.