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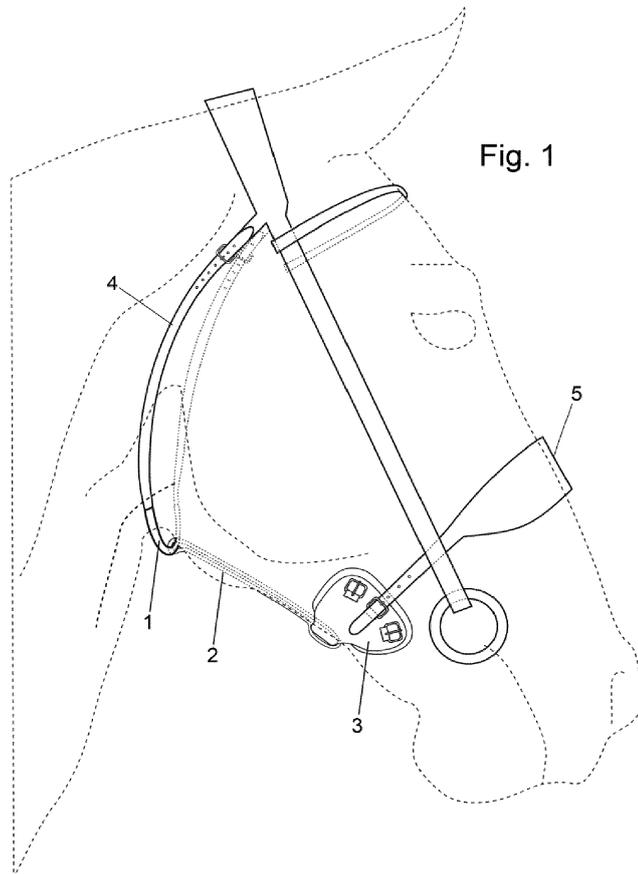
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(54) **DEVICE FOR THROATLATCH OF HORSE BRIDLES WITH BITS**

(57) The invention relates to an anatomical throat release device for throatlatches of horse bridles with bits that is made up of a single piece (1) located in the centre of the throatlatch (4), meaning in the middle of the path

surrounding the horse's neck and which, once placed, corresponds to the trachea/throat area, which is precisely the area in which pressure must be avoided when placing and tightening the throatlatch (4).



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Description**OBJECT OF THE INVENTION**

[0001] The object of the present invention is to file an anatomical device able to act as a release for the piece or strap that passes over the horse's throat in existing horse bridles with bits, with the aim of transforming any model or version of a horse bridle with a bit into one that has no restrictions of air and/or saliva intake through the horse's throat.

TECHNICAL FIELD

[0002] This novel device for throatlatches of bridles with bits is especially applicable in the equestrian sector, in which a throatlatch with said features is required.

BACKGROUND OF THE INVENTION

[0003] On the market, there are already several types of bridles used for horse riding that aim to hold the bit in the horse's mouth to be able to steer it by means of reins connected to the same.

[0004] All of them have a throatband or throatlatch, which is the strap that holds the head, prevents the bridle from coming off and goes over the neck at the throat area, being tightened below the jaw.

[0005] Many of them have been able to improve the horse's comfort in many ways, by means of the anatomical designs thereof, but none has been able to improve the throatlatch, which is merely a strap going around the horse's throat that is only used to help support the bridle.

[0006] It must be noted that in the majority of designs, and more so in the traditional design, it is very difficult to optimally adjust the strap in this area, and it is often fastened too tight, constantly choking the horse. In fact, the term for throatlatch in Spanish is literally translated to "choke" because of these consequences.

[0007] The choking of the horse caused by the pressure of the tight adjustment of the throatlatch on the horse's trachea leads to a lack of oxygen, excessive saliva in the mouth due to the difficulty in swallowing, discomfort, leading to a lack of attention in the horse's work, and undesirable behaviour of the horse due to these bothersome effects.

[0008] In other cases, by not being able to improve said piece and the drawbacks thereof, the throatlatch was eliminated, leading to the negative consequence of the entire weight load of the bridle and bit being placed on the area of the horse's poll, forming a stop at the rear part of the base of the ears, causing the discomfort and excessive pressure that is already known, and creating the risk that with any sudden jerk or rough movement the bridle could come off, and it is even known that experienced horses are able to remove a bridle without a throatlatch by merely lowering their head and shaking it strongly from side to side.

[0009] In yet other cases, the throatlatch was moved forward and adjusted to the cheekpiece, hindering the movement of the same, in opposition to the normal functioning required in equestrian disciplines which need free movement to support the bit in an unrestricted way and to be able to communicate orders to the horse by means of the reins without any impediment.

[0010] In short, up to now bridles with throatlatches have always choked the horse or been adjusted too loosely, because when a horse stretches its neck, such as during a jump over a fence or other obstacle in eventing, stretching their entire body, even their head and neck as far as they can, the neck gets thinner and changes shape, and it is then that the throatlatch becomes loose or moves forward, causing the bridle to lose support and become less secure on the horse's head.

[0011] Conversely, when the horse retracts its neck, arching it and lowering its head, the throatlatch is then too tight, and all of the pressure is concentrated at the trachea, which is soft and hollow, causing the horse to choke, as well as an accumulation of fluids and difficulty in breathing, as previously mentioned.

[0012] With regard to the horse's behaviour, it may cause the horse to resist doing certain postures or have a bad attitude when arching its neck, which is a traditional posture in dressage.

[0013] In essence, until now this problem has not been solved in an effective way and the present invention solves the following:

- the problem of excessive tightening of the throatlatch on the trachea/throat that is traditionally applied for the purpose of holding the bridle on the horse's head and preventing it from coming off,
- the problem of weight being put only on the base of the horse's ears and poll, eliminating the pressure of the noseband straps, moving the weight to the lower area of the head by having the noseband hold the throatlatch. By means of the use of this throatlatch with a throat release, the weight load of the cheekpieces and the bit are placed on the poll and on the ears and the weight load of single-strap nosebands is placed on the throatlatch at the lower area of the head.

[0014] Summing up, with this novel invention, a common traditional bridle with a bit is redesigned to provide comfort to the horse and allow for an efficient and safe use of the throatlatch by means of the central piece thereof and jointly redistribute the weight load of the different parts of the bridle to different areas (upper area: weight of the bridle with a bit, and the lower area: weight of the noseband) to provide relief to the horse.

[0015] Bridles with bits for working with horses have sportive technical features, many of which are regulated by official regulations of different equestrian disciplines, are always used very tightly and have very specific technical requirements so that each one of the complements

thereof (bit, German reins, martingale, etc.) can work properly. In light of the foregoing arguments, we can ensure that the work bridle with a bit greatly differs from a stable bridle (without a bit or adjustment of any kind) which is only used to lead the horse by the muzzle thereof with a halter, standing on the ground using voice command. Therefore, it would not be obvious for a person skilled in the art of saddle making to arrive at this invention, given that it not only involves placing a piece on a throatlatch, but rather distancing it, by means of an anatomical shape, from the throat, and it permanently prevents the excess tightening thereof on the trachea/throat, while at the same time redistributing the weight load of the bridle, from the top (area of the poll and ears) to the lower part of the horse's head (jaw, neck/throat), without affecting the connection and functioning of other complements for steering the horse to be able to perform the necessary manoeuvres in equestrian sport.

[0016] Due to the foregoing points, the present anatomical throat release device for the throatlatch of a bridle with a bit not only solves the problem of tightening the throatlatch to the proper adjustment thereof so that the same does not come off the base of the head without choking the horse, but also allows the noseband to be supported below the head in a way that has not been known until now, since on the contrary, if it were loose, as is the case nowadays given that there is no anatomical throat release device, it could not support the noseband in its place due to the movement thereof.

[0017] In the state of the art, there are accessories commonly known as "collars", which seem similar, given that they go around the neck and throat of the horse, and have a similar appearance to the present invention, however, all of them have been designed to choke the horse and prevent the vice of swallowing air due to boredom or anxiety, which are acquired habits that lead to serious stomach problems, dyspepsia and colic. It is important to note that all of these accessories carry out the opposite function to that of the novel contribution of the present invention, meaning they are in tight contact with the trachea and compress it to reduce air intake as much as possible, while the present invention, as described in this application, releases the tightness from the trachea and never puts pressure on the same. Most of these compression collars have a central hinge to be able to move in an articulated way and be fitted as close and tightly as possible to the trachea to keep the collar in very tight contact with the horse's neck. These collars do not form part of bridles, but are merely accessories to place on the horse when it is in a horsebox or at rest, not engaged in activity, unlike the present invention which does form part of the throatlatch of work bridles or bridles with a bit.

[0018] Based on the object of the claimed invention, a search has been carried out in the corresponding databases and on the Internet for accessories that can be interpreted as similar to this invention and it is important to highlight their differences with respect to this application. Below are some documents that are worth describ-

ing in order to point out their differences with regard to the present invention:

Document US280237A describes a halter, cabestro or tether, that is tied to the head or neck of the horse to lead them to the stable when they are not being ridden, bring them onto transport or secure them to a fixed point and keep them calm when preparing them, tying them to a fixed point, etc., meaning it does not support the bit and therefore is not a bridle for horse riding as is the present invention. Under the jaw of the animal it comprises a piece provided with two oblique side loops to which straps or ties are fastened which pass by the lower part of the neck, close to the trachea/throat of the horse, forming what is commonly known as a throatlatch, while below and towards the horse's mouth, said metal piece couples to an additional piece, also metal or casting, which allows the same to be secured to the noseband. This metal accessory connects to the collar of the halter to the muzzle, since a halter does not have a noseband in the strict sense of the word, and is not designed to make direct or close contact with the animal's skin, since the function thereof is to keep the horse fastened with a strap in order to lead the horse when on the ground, meaning when the horse is not being ridden, which is why it is made of an exposed metal piece without any type of cover or protection because it does not need it, given that there is no risk of adjusting it too tightly to the horse's neck, but rather it will always hang loose with enough space, just as in all current halters. It is important to note that in 1883 this invention greatly improved the possible manoeuvres when moving a horse or keeping it still with the simple and rustic leather strip that existed at the time.

Document US2008115468 describes a hackamore style bitless horse bridle for guiding horses comprising a control plate that hangs under the animal's jaw, made of metal, plastic or another rigid material, with lateral members joined at an angle, a padded noseband joined to one end and the throatlatch straps joined to the other. A rein is attached to said control plate to apply pressure to the same and make it pivot, so that by adjusting the noseband and the retention strap of said control plate, the control plate can hang approximately one inch below and parallel to the animal's lower jaw without being in contact with the jaw. Just as in the immediately preceding document, this accessory, made of metal, plastic or another rigid material, connects to the collar of the halter to the muzzle, since a halter does not have a noseband in the strict sense of the word and is not designed to make direct or close contact with the animal's skin, since the function thereof is to keep the horse secured with a strap to lead the horse when on the ground, meaning when the horse is not being ridden, which is why it is made of an exposed metal piece

without any type of cover or protection because it does not need it, given that there is no risk of adjusting it too tightly to the horse's neck, because it always hangs loose with enough space, just as in all current halters.

Document WO2020187717 describes a bitless horse bridle, used to guide horses, which is made up of a connection plate configured to hang below the animal's jaw, made of metal, plastic or another rigid material. This plate has a shock-absorbing layer, in particular made of foam that protects the horse in the area where there is pressure from the connecting section that is below the horse's tongue, guaranteeing a good transmission of power from the lever that is used to control the horse. Traction straps connect said plate to the throatlatch strap and to the noseband. Just as in the immediately preceding documents, this accessory, made of metal, plastic or another rigid material, connects the collar of the halter to the muzzle, since a halter does not have a noseband in the strict sense of the word, and is not designed for direct or close contact with the skin of the neck and throat of the animal, or for securing the bit in the horse's mouth, but rather keeping the same secured to the horse with a strap to lead the horse from the ground, meaning without the horse being ridden.

Document No. WO2004062524A1 discloses a throat support device having one or more lifting mechanisms, each with a tip, each tip adapted to fit into a location immediately adjacent to and behind the bones and cartilage of an animal to control upper airway dysfunction caused by dorsal displacement of the soft palate (DDSP) in the horse. Unlike conventional treatments involving surgery, the throat support device provides a non-invasive and convenient means of diagnosing and treating upper airway dysfunctions.

[0019] The aforementioned documents have in common that they include a rigid piece below the animal's jaw which by no means helps solve the problems mentioned in the present application. It is only a joining link between the noseband and the straps of the throatlatch, which are never tightened, but rather loose, with the aim of creating a rigid surface in the area below the jaw that forms a type of brake or control plate for the horse when the horse is being led walking without a rider, or being secured to a fixed point, such as a post. In the last case cited, the device is for therapeutic use.

[0020] Given the current state of the art and the aim of perfecting the throatlatch, the anatomical throat release device of this application provides, for the very first time, a solution to a problem that has not been solved since bridles with bits were invented.

[0021] Due to the aforementioned reasons, it must be stated that in the current state of the art, no type of device, complement, accessory or complementary piece with the

technical features of the present invention has been found.

DESCRIPTION OF THE INVENTION

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[0022] This novel anatomical throat release device for throatlatches of horse bridles with bits is made up of a single piece that is located in the centre of the throatlatch, meaning in the middle of the path surrounding the horse's neck and which, once placed, corresponds to the trachea/throat area, which is precisely the area in which pressure must be avoided when placing and tightening the throatlatch.

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[0023] This novel device, due to the rigid or semi-rigid composition and anatomical shape thereof, is always able, without exception, to be kept distant from the trachea in order to fulfil the purpose thereof by preventing contact with the horse's throat and ensuring there is never excessive tightness in that area, thereby preventing the common problems associated with a tight throatlatch.

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[0024] As the horse moves its head, either downwards arching its neck or stretching forwards, the neck strap, or throatlatch is kept in its place, but with a central portion (release device) distant from the trachea/throat which, in spite of the superficial contact with the horse's skin, will never tighten or loosen, meaning the throatlatch will be fitted without choking the horse, but will support the bridle, as that is the function thereof.

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[0025] Another advantage thereof is that by means of an adjustable strip or strap, a padded piece can be connected and supported, located on the lower jaw of the horse, incorporating at least 2 buckles, where the upper part of the noseband is attached.

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[0026] This padded piece is joined to a noseband which connects at the lower part of the jaw, in other words, it is novel in that it is supported from below, unlike existing nosebands that are joined at the sides of the upper part of the noseband by means of two strips, one on each side of the horse's face.

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[0027] With this new connection, traditional straps that until now have run simultaneously below each cheek-piece that hold the bit can be eliminated, removing, and thus alleviating, the pressure by removing the multiple supports and overlapping strips over the horse's face and liberating the nerves and sensitive areas thereof.

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[0028] Furthermore, the strip or strap between the anatomical release device of the throatlatch and the padded piece that is joined to the noseband at the lower part of the jaw can be elastic to provide greater flexibility and elasticity to the assembly and be positioned over the gap that is created in the centre of the lower jaw of the horse's head, relieving pressure and fully adapting to the horse's anatomy, which makes it so the same does not rub against the horse's skin. It is important to mention that, up to now, the nosebands that connect at the top go over the entire cheek, putting pressure on sensitive neural and vascular areas.

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DESCRIPTION OF THE DRAWINGS

[0029] To complete the description made herein, and for the purpose of helping to make the features of the invention more readily understandable, this description is accompanied by a set of drawings constituting an integral part of the same, which by way of illustration and not limitation represents the following:

- Figure 1 shows a horse wearing a bridle that incorporates the device of the invention.
- Figures 2 and 3 respectively represent the pieces that make up this device, detached, and joined together in position, respectively.
- Figure 4 is a view from below of how the device of the invention appears on the horse's head.

PREFERRED EMBODIMENT OF THE INVENTION

[0030] As can be seen in the attached figures, the anatomical throat release device for a throatlatch of a bridle with a bit is made up of a concave piece (1), the piece also being able to take any shape that distances the same from the curve of the throatlatch (4) strap in the throat/trachea area of the horse.

[0031] It can be made of any rigid, semi-rigid, semi-hard or soft and leather-lined, or plastic material, covered with any protective material, with or without padding as long as by being concave it relieves the pressure on the horse's trachea.

[0032] This piece (1), which serves as an anatomical release device, can be curved, rectangular, triangular, trapezoidal, or any shape or outline as long as it remains distanced from the curve of the throatlatch strap, allowing the use thereof without putting pressure on the horse's throat or trachea.

[0033] The piece the invention is made up of is entirely adaptable to the rest of the bridle in terms of its shape, material, colour, textures, etc., and can be fixed or removable to be added to any bridle by changing the shape or size thereof.

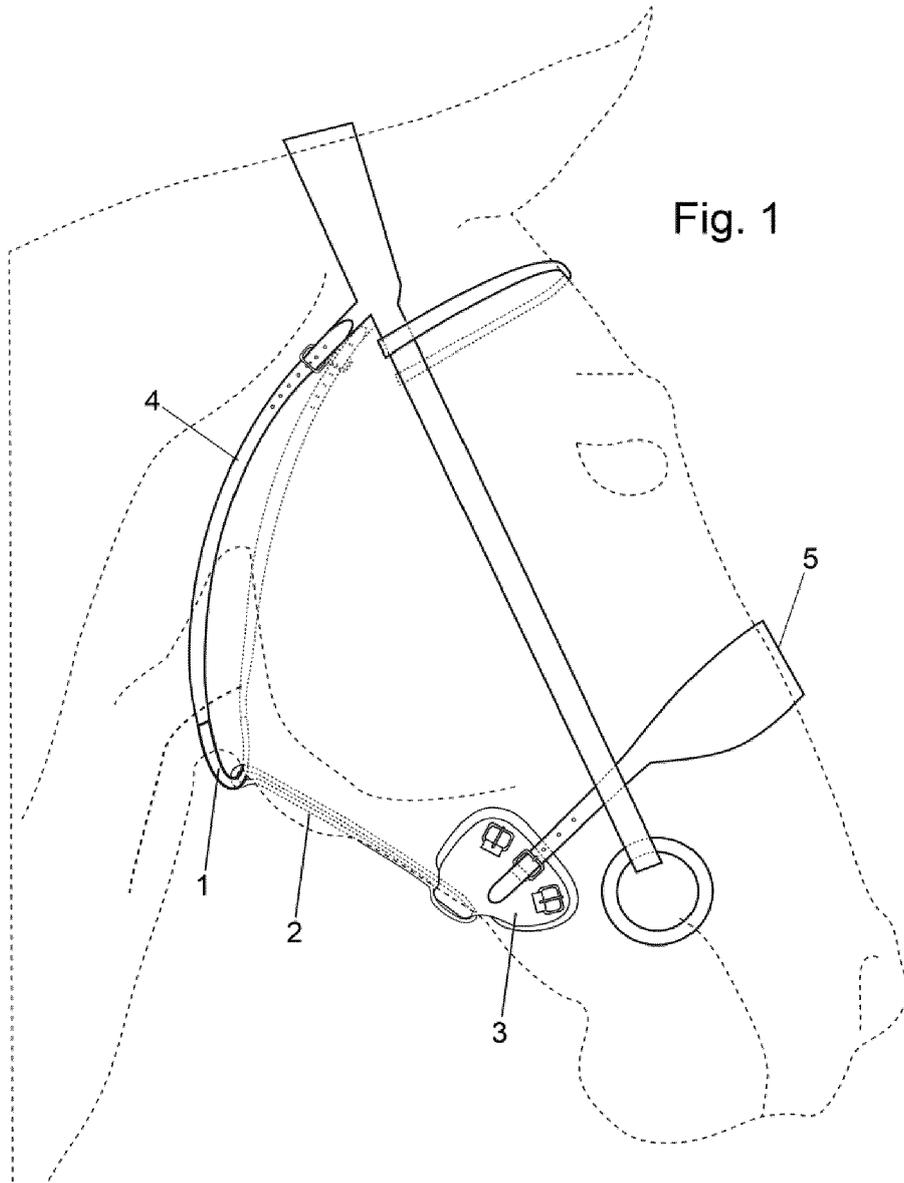
[0034] The strip or strap (2) that is attached to the padded piece (3) on the lower jaw can be entirely or partially elastic.

[0035] The padded piece (3) that rests on the lower jaw has at least 2 buckles (31) to fasten, position and adjust the straps of a noseband (5), however many there may be, which is placed below the horse's jaw/neck.

[0036] Having sufficiently described the nature of the invention, as well as a way of putting it into practice, it must only be added that said invention may undergo certain variations in shape, arrangements and materials, as long as said alterations do not substantially alter the features claimed below.

Claims

1. A device for throatlatches of horse bridles with bits, **characterised in that** the central area of the throatlatch has an anatomical throat release piece (1) which is concave or any other shape that distances the same from the curve of the throatlatch strap (4) in the area of the horse's throat/trachea.
2. The device for throatlatches of horse bridles with bits, according to claim 1, **characterised in that** the piece (1) is attached to the lower part of a noseband (5) by means of an adjustable strip or strap (2).
3. The device for throatlatches of horse bridles with bits according to claims 1 and 2, **characterised in that** it has a strip or strap (2) that is joined to the lower part of the noseband (5) by means of a padded piece (3) that rests on the horse's lower jaw and which incorporates at least 2 buckles (31) by means of which the upper part of the noseband (5) is fastened.
4. The device for throatlatches of horse bridles with bits according to claim 1, **characterised in that** the piece (1) is a fixed part of the throatlatch strap (4).
5. The device for throatlatches of horse bridles with bits according to claim 1, **characterised in that** the piece (1) is a removable part of the throatlatch (4) that can be added to any bridle.



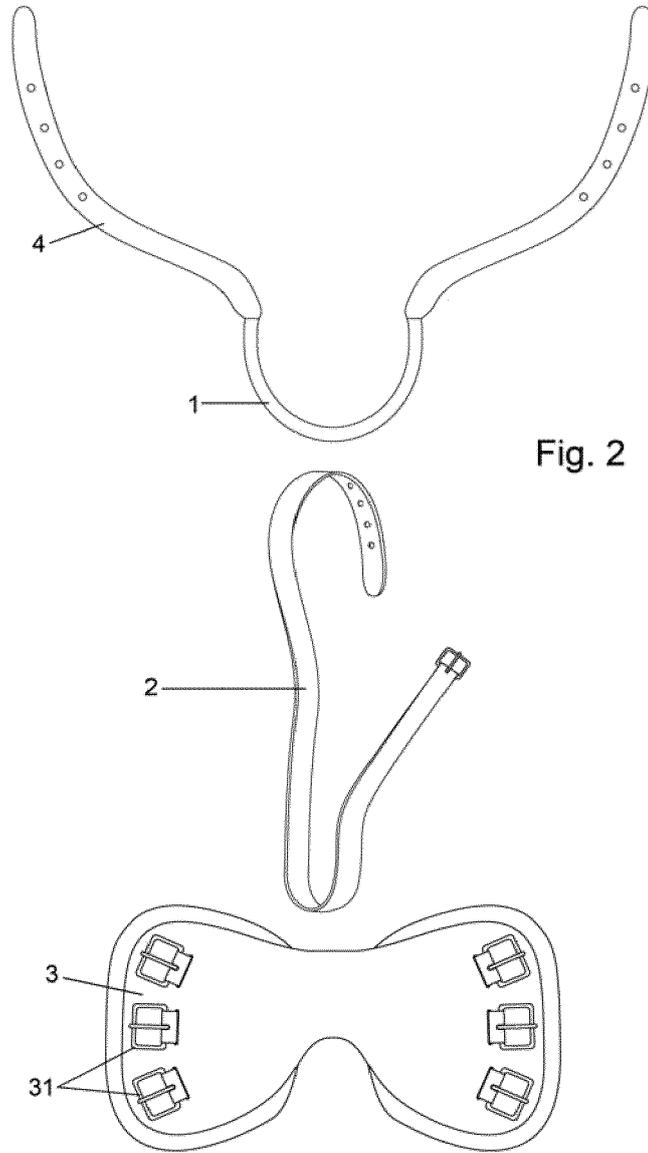


Fig. 2

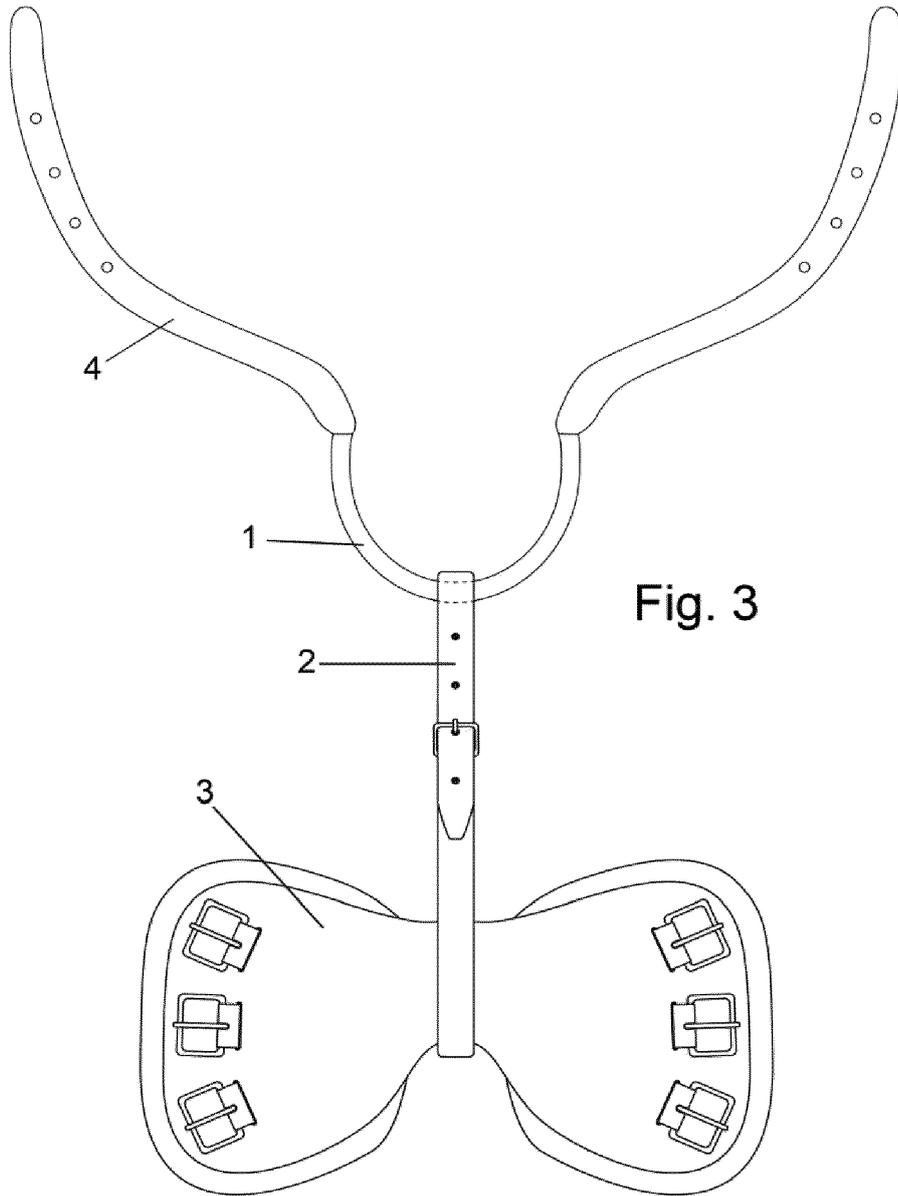
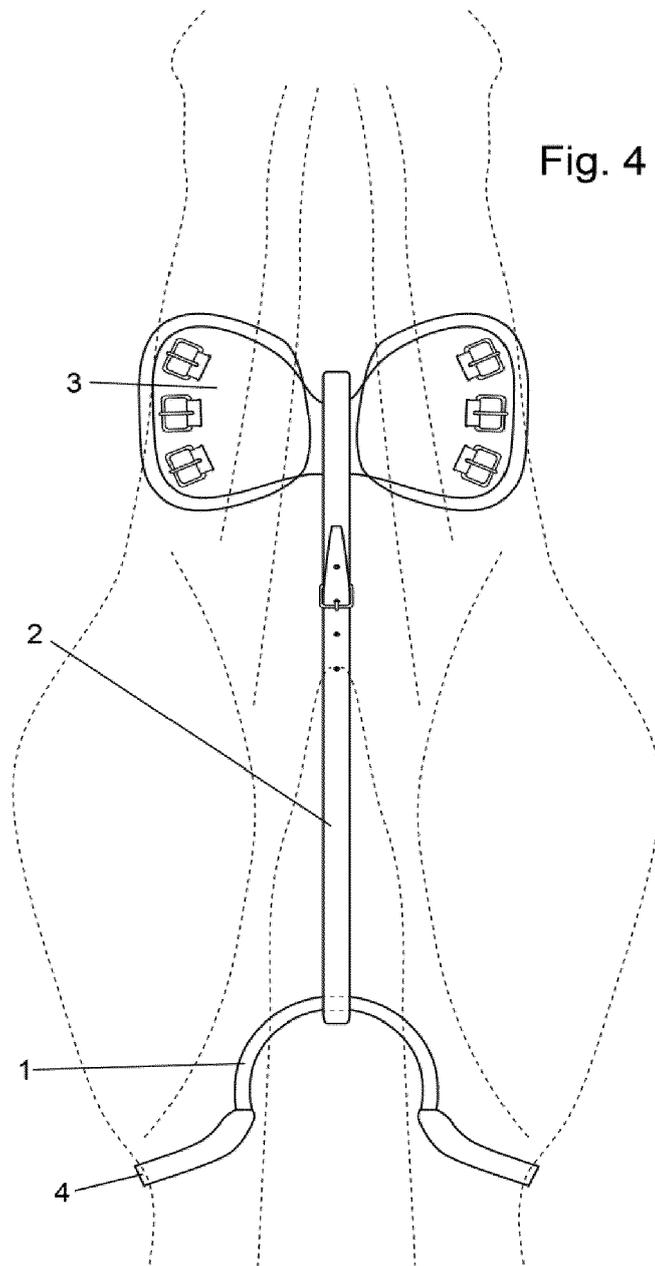


Fig. 3





EUROPEAN SEARCH REPORT

Application Number
EP 23 17 8175

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	<p>US 7 707 809 B1 (TERWILLIGER AL G [US]) 4 May 2010 (2010-05-04) * abstract * * column 2, line 28 - column 5, line 42 * * figures 1-10 * * claims 1-8 *</p> <p style="text-align: center;">-----</p>	1-5	<p>INV. B68B1/04</p>
			<p>TECHNICAL FIELDS SEARCHED (IPC)</p>
			<p>B68B</p>
<p>The present search report has been drawn up for all claims</p>			
<p>Place of search</p> <p>The Hague</p>		<p>Date of completion of the search</p> <p>6 October 2023</p>	<p>Examiner</p> <p>Espeel, Els</p>
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 23 17 8175

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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06-10-2023

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 7707809	B1	04-05-2010	NONE

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- US 280237 A [0018]
- US 2008115468 A [0018]
- WO 2020187717 A [0018]
- WO 2004062524 A1 [0018]