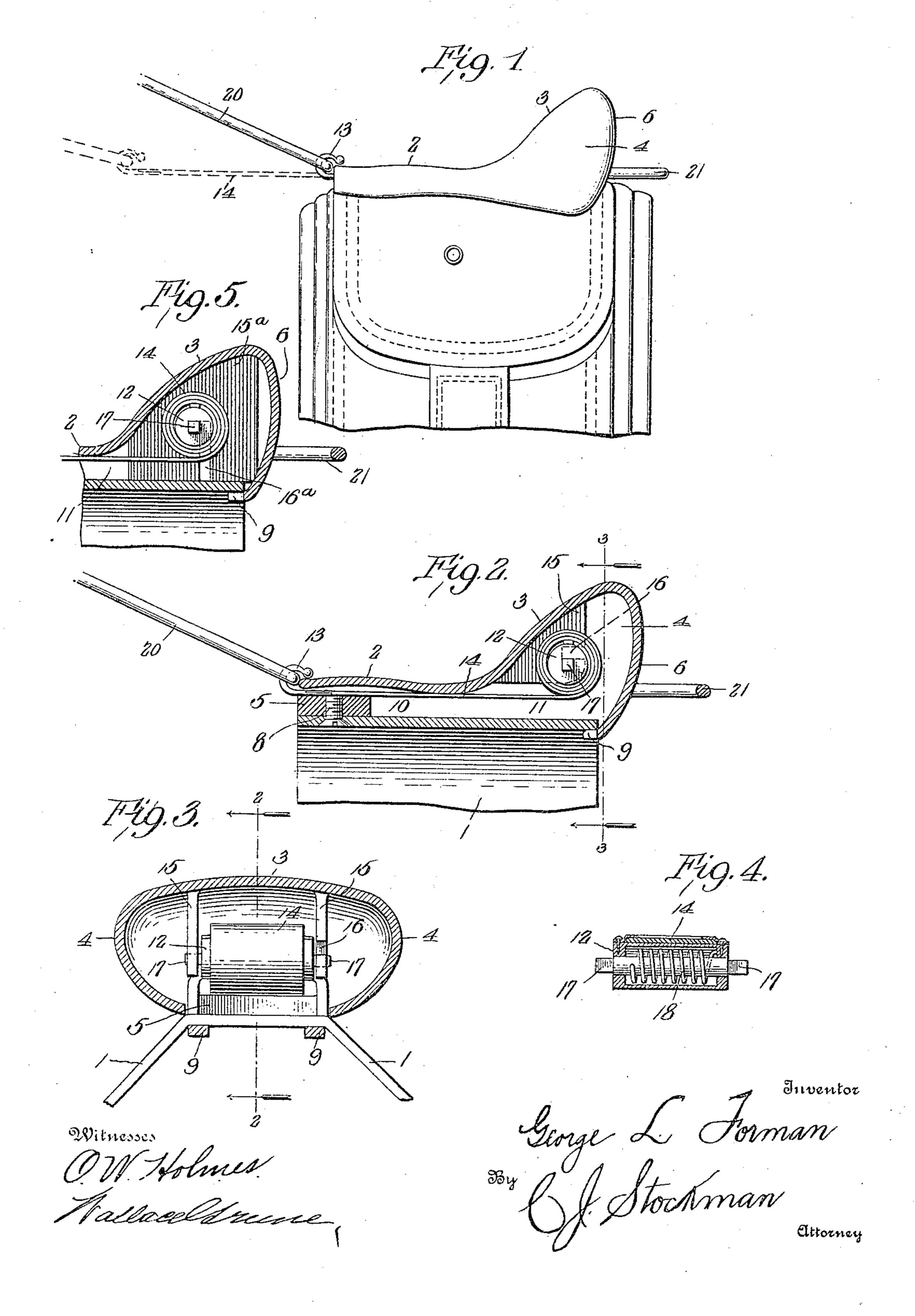
## G. L. FORMAN. HARNESS SADDLE. APPLICATION FILED OCT. 7, 1905.



## UNITED STATES PATENT OFFICE.

## GEORGE L. FORMAN, OF LOUISVILLE, KENTUCKY.

## HARNESS-SADDLE.

No. 816,450.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed October 7, 1905. Serial No. 281,763.

To all whom it may concern:

Be it known that I, George L. Forman, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of 5 Kentucky, have invented new and useful Improvements in Harness-Saddles, of which the

following is a specification.

This invention relates to improvements in harness-saddles, and particularly to the 10 seats, trees, and check-hooks thereof; and it consists in certain peculiarities in the construction and arrangement of parts and in certain novel combinations of elements substantially as hereinafter described, and par-15 ticularly pointed out in the subjoined claims.

It has hitherto been proposed to provide harness-saddles with checkrein-hooks which are adapted to be drawn forward by the forward or downward movement of the horse's 20 head and are automatically drawn back to their former positions by springs connected therewith in the upward or rearward movement of the horse's head. While such idea is recognized as having some advantages in 25 that it permits a limited freedom of movement of the horse's head without putting a strain on the rein of the bridle—that is to say, on the checkrein or overdraw—and keeps said rein or overdraw taut at all times, yet 30 the previous embodiments thereof have been unsatisfactory to such an extent as to prevent their use. Among the principal causes of the non-adoption of the devices embodying such idea is the fact that they have been 35 constructed with a view of mounting them above and upon the seat in the place occupied by the ordinary check-hook, thus locating them conspicuously in view and marring the appearance of the saddle. Another cause 40 of dissatisfaction is due to the fact that they contemplate the use of a bolt for securing them, said bolt extending through the tree and being provided beneath the latter with a holding-nut which forms a projection which 45 bears upon and rubs the back of the animal, soon producing a sore, if the use of the saddle is continued.

The objects of my invention are to provide a harness-saddle which will overcome the dis-50 advantages hereinbefore named—that is to say, one of the important objects of the invention is to provide a harness-saddle having its tree and seat connected with each other by means which dispenses with the necessity of 55 employing a bolt and nut and which will pro-

vide a bearing-surface having no projecting parts liable to rub the horse's back.

Another of the important objects of the invention is to provide a harness-saddle with a checkrein-hook or other suitable means for 60 connection with the before-mentioned bridlerein adapted to be moved relatively to the seat and provided with a means for returning it to its normal position, which returning means is arranged in a space provided there- 65 for within the saddle, and the final or ultimate object of the invention, secured by the construction illustrated in the accompanying drawings, is to provide a harness-saddle comprising a movable checkrein-hook having 70 its automatic returning means located within the saddle in a most convenient place in said saddle; further, having its parts so connected with each other as to avoid the necessity of employing a fastening means which will be 75 liable to produce a sore on the back of the animal.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a saddle embodying my improvements. Fig. 2 is a vertical longitudinal section thereof on the line 2 2 of Fig. 3. Fig. 3 is a transverse section on the line 3 3 of Fig. 2. Fig. 4 is a longitu- 85 dinal section through the spring-drum which carries the strap of the check; and Fig. 5 is a sectional view of the rear portion of a seat and tree, showing a slightly-modified form.

The same numerals of reference designate 90 the same parts in the several views.

1 designates the tree of the saddle. Said tree may be of the usual or any suitable construction and of any suitable size and material. The seat, however, in the preferred 95 embodiment herein shown of the invention is of peculiar construction for the purpose of providing within it a chamber adapted to contain the means employed to keep the checkrein or overdraw taut and at the same 100 time permit a limited movement of the checkhook and corresponding forward and backward movement of the horse's head. It also is of peculiar construction to obviate the necessity of employing the bolt-and-nut con- 105 necting means hereinbefore referred to. The particular form of seat shown in the accompanying drawings and now to be described is believed to be the best embodiment of the ideas upon which the present invention is 110

founded, carrying, as it does, said ideas into practice in a most practical way and embracing all of the several advantageous features of the invention. I wish it understood at 5 the outset, however, that while the detail construction shown is preferred, yet changes therein may be made without departing from

the spirit of the invention.

The seat shown comprises an upper wall 2, to the rear portion 3 of which extends inclinatorily upward and rearward. Said seat throughout its length is provided with flanges which extend downward from its top wall and form side walls 4, and said side walls 15 bear upon the tree 1 and are connected with each other at the front by means of a transversely-extending bridge-piece 5, while at the rear they are connected with each other by a flange which forms a rear wall 6, which 20 closes the rear end of the seat. The several walls are preferably gracefully curved and merge one into the other, thus adding to the attractive appearance of the saddle. Said seat is secured to the tree 1 at the front by 25 means of a screw 8, the head of which is preferably countersunk in said tree, while its stem extends into said bridge-piece. The rear of the seat preferably has a hook engagement with the tree, and said engagement 30 is preferably effected by means of bent-over lips 9 or a flange projecting forward from the free edge of the rear wall 6 of the seat and adapted to take under the rear edge of the tree. 21 designates the crupper-loop. It 35 will be observed that the seat thus formed provides communicating chambers 10 and 11 in the front and rear portions thereof, respectively. Said rear chamber 11, which is arranged in the vertically-enlarged rear por-40 tion of the seat, is adapted to contain the means for automatically returning the checkhook 13 to its rear position, which means preferably comprises a spring-drum 12, and the forward chamber 10 provides a passage 45 through which extends the strap 14, by means of which said drum is connected with said hook. The open front end or mouth of said forward chamber, moreover, is contracted by the bridge-piece 5, which thus coöper-50 ates with the side walls of said chamber in

guiding the strap 14 in its movements. In order to support the drum 12 in position, the rear portion of the seat is formed with depending flanges 15, which extend into 55 its chamber 11 and are spaced apart to permit the drum to be arranged between them. Said flanges have openings 16 adapted to receive, and the walls of which form bearings for, the projecting ends of a fixed shaft 17, 60 upon which the drum 12 is mounted to rotate. Said openings 16 preferably extend from and through an edge of the respective flanges in order to permit the introduction thereinto of the shaft 17 when the drum is 65 mounted thereon, and said openings are

preferably L-shaped, as shown, to efficiently hold the shaft in place while permitting it to be inserted from the edges of the flanges, as set forth. Said flanges may terminate short of the rear wall 6 and bottoms or edges of the 70 walls 4, as shown best in Figs. 2 and 3, or they may extend to said rear wall and edges in order to brace said wall and bear upon the tree 1, as shown in Fig. 5, in which they are designated by the reference characters 15<sup>a</sup> 75 and their slots by the characters 16<sup>a</sup>. Said drum 12 is provided with a coiled spring 18, one end of which is attached to the drum and the other end of which is attached to said shaft. The purpose of said spring, obvi- 80 ously, is to wind back upon the drum the portion of the strap 14 unwound therefrom in the forward movement of the horse's head and to keep said strap taut at all times. In practice the spring will preferably be of 85 strength sufficient not only to rewind the strap, but, furthermore, to provide some additional force which must be overcome in order to draw the strap and check-hook forward, whereby the purpose of the overdraw 90 or checkrein will not be lost.

In assembling the parts the drum is inserted to its place in the seat through the open lower end of the latter and the ends of its shaft are introduced into the bearings pro- 95 vided therefor in the flanges 15 or 15<sup>a</sup>. The free end of the strap 14 is then drawn outward through the chamber or passage 10 and the check-hook 13 is secured thereto. After this has been done the seat is secured to the 100 tree 1 by engaging its rear lip or lips 9 with the rear edge of the latter and by screwing the forward edge of the tree to the bridgepiece 5. The saddle is then completed by mounting on said seat and tree the usual or 105 any suitable coverings and pads, which form no part of the present invention. In the assembled position of the parts the check-hook 13 is at the forward edge of the tree and projects into the open front end or mouth of the 110 chamber 10 and its rear movement is stopped by the forward end of the seat. The entire checkrein or overdraw mechanism, with the exception of the hook, is concealed within the seat, so that it not only is protected there- 115 by, but, furthermore, its presence does not mar the appearance of the saddle. Again, the parts are readily assembled, and the device as a whole is of the most durable, inexpensive, and pleasing appearance and presents 120 none of the projections which render saddles uncomfortable to the animal and are liable to and do produce sores by rubbing the skin over the backbone.

From the foregoing it will be apparent that 125 I have so altered the construction of the ordinary harness-saddle as to provide within the same a space which extends beneath the seat of the saddle and is adapted to contain a returning means—that is to say, a means for 130

keeping the bridle-rein taut while permitting movement of the horse's head—into which space projects a suitable supporting means for said returning means and which space has 5 an open end from which said returning means is adapted to extend. It will further be apparent that I have embodied such novel and advantageous features of construction in a construction of saddle which is further new 10 and advantageous as to the details of its seat and as to the manner of connecting its seat and tree with each other, and generally that a saddle constructed as herein set forth embraces advantageous features of construction 15 and arrangement which will readily commend it to those persons who desire a means for keeping the checkrein or overdraw taut while permitting limited downward movement of the head of the animal, but who have 20 been deterred from using the arrangements hitherto proposed for such purpose because of the location of the same upon and outside of the saddle, as aforesaid. A check-hook constitutes a most desirable means for con-25 necting the strap of the returning means with the checkrein or overdraw 20, for which reason it is preferred; but other means suitable for the purpose may be employed and will be regarded as within the spirit and scope of the 30 present invention.

Having thus described the invention, what I believe to be new, and desire to secure by

Letters Patent, is—

1. A harness-saddle provided interiorly 35 with a space which extends beneath its seat and has an open mouth, supporting means in said space, and a returning mechanism supported by said supporting means and extending beneath said seat and provided with 40 means for connecting the same with the bridle-rein of the harness.

2. A harness-saddle provided interiorly with a space which extends beneath its seat and has an open mouth, supporting means in 45 said space, a spring-drum mounted in said space and upon said supporting means, a strap extending from said drum and beneath said seat and means for connecting said strap with the bridle-rein of the harness.

3. A harness-saddle comprising a seat and a tree and having a chamber between the same, a supporting means in said chamber, and a returning means mounted in said chamber and supported by said supporting means, 55 said returning means being movable relatively to said seat and having means adapted to con-

nect it with the bridle of the harness.

4. A harness-saddle, comprising a seat and a tree, said seat being constructed to provide, 60 between it and the tree, communicating chambers which are located one in advance of the other and of which the rear chamber is of greater diameter than the forward chamber and said forward chamber having an open 65 mouth, a supporting means arranged in said

rear chamber, and a returning means for said hook, carried by said supporting means and having a strap extending into said forward chamber and adapted to be drawn thence through the open forward end of the same, 70 said strap having means adapted to connect

it with the bridle-rein of the harness.

5. A harness-saddle, comprising a seat which is expanded at its rear end and has side and rear flanges which depend from its upper 75 wall and are relatively arranged to form in the body of said seat communicating chambers which extend longitudinally thereof and are closed at the side and rear by said flanges, and a returning means supported in the rear 80 chamber and extending through the forward chamber and provided with means adapted to connect it with the bridle-rein of the harness.

6. A harness-saddle, comprising a seat hav- 85 ing top, side and rear walls relatively arranged to provide within it communicating chambers located one in advance of the other, the rear chamber being expanded with respect to the ferward chamber and said forward cham- 90 ber having an open mouth, a supporting means in said rear chamber, and a returning means mounted in said rear chamber upon said supporting means and having a part adapted to extend through the forward cham- 95 ber and provided with means for connecting it with the bridle-rein of the harness.

7. Aharness-saddle, comprising a seat having top, side and rear walls relatively arranged to provide within it communicating cham- 100 bers located one in advance of the other, one of said chambers having spaced flanges within its interior, a check-hook adapted to move relatively to said seat, and a returning means for said hook, supported by said flanges and 105

connected with said hook.

8. A harness-saddle, comprising a seat vertically expanded at the rear and having an upper wall provided with depending side and rear flanges relatively arranged to provide 110 communicating chambers which extend longitudinally of the seat and are closed at the side and rear and open at the front, a springdrum mounted to rotate in the vertically-expanded rear chamber of the seat, a strap on 115 said drum, extending thence into the forward chamber and adapted to be drawn through the open forward end of the latter and a checkhook connected with the forward end of said strap.

9. Aharness-saddle, comprising a seat having a chamber formed within it and provided within said chamber with spaced flanges, a spring-drum supported by said flanges and mounted to rotate between the same, a strap 125 mounted on said drum and a check-hook con-

nected with said strap.

10. A harness-saddle, comprising a seat vertically expanded at the rear and having an upper wall, side walls and a rear wall rela- 130

120

tively arranged to provide communicating chambers closed at the top, sides and rear, spaced flanges in said rear chamber, a checkhook a@apted to move relatively to said seat 5 and a spring-actuated returning means for said hook, connected therewith and arranged in said chambers and supported by said

flanges.

11. A harness-saddle, comprising a seat 10 vertically expanded at the rear and having an upper wall, side walls and a rear wall relatively arranged to provide communicating chambers closed at the top, sides and rear, spaced flanges in said rear chamber, said 15 flanges having slots, a shaft supported by said flanges and having its ends mounted in said slots, a drum mounted to rotate on said shaft, a spring connected to said drum and shaft, a strap mounted on said drum, and a 20 check-hook connected with said strap.

12. A harness-saddle, comprising a chambered seat having a bridge-piece at its forward end, a tree secured to said bridgepiece, a check-hook adapted to move rela-25 tively to said seat and a returning means for said hook connected therewith and arranged

within the chamber in said seat.

13. A harness-saddle provided with a chamber arranged beneath the upper surface of its 30 seat, a supporting means arranged in said chamber, a check-hook adapted to move relatively to said saddle, and a returning means for said hook carried by said supporting means.

14. A harness-saddle provided interiorly with a chamber which is open at the front end, a supporting means arranged in said chamber, a check-hook outside said chamber, and a returning means for said hook, 40 comprising a spring-drum which is mounted in said chamber and upon said supporting means and is provided with a strap which is adapted to extend through the open front end of the saddle, and is connected with said 45 hook.

15. A harness-saddle provided interiorly with a space which extends longitudinally thereof, beneath its seat and is open at the front, a supporting means arranged in said 50 space, a connecting device movable outside of said space and in position to have its rearward movement stopped by the front end of said seat, and a returning means for said device, supported in said space and upon said 55 supporting means and provided with a strap which extends longitudinally of said space and is connected with said device.

16. A harness-saddle provided interiorly with a space which extends longitudinally

thereof beneath its seat and is open at the 60 front, a supporting means arranged in said space, a check-hook movable outside of said space and in position to have its rearward movement stopped by the front end of said seat, and a returning means for said device, 65 comprising a spring-drum mounted in said space and upon said supporting means and provided with a strap which extends longitudinally of said chamber and is connected with said hook.

17. A harness-saddle comprising a seat and a tree and having a space between the same, a bridge-piece extending across but not closing one end of said space and connected with said seat and tree, a lip connect- 75 ing the tree and seat with each other at the end remote from said bridge-piece, and a returning means adapted to be connected with the bridle-rein and supported in said space.

18. A harness-saddle, comprising a cham- 80 bered seat having a bridge-piece at one end and a lip at the other end, a tree one end of which is secured to said bridge-piece and the other end of which is engaged by said lip, a movable check-hook, and a returning means 85 for said hook connected therewith and ar-

ranged in the chamber in said seat.

19. A harness-saddle, comprising a chambered seat having a bridge-piece at one end and a lip at its other end, a tree one end of 90 which is secured to said bridge-piece and the other end of which is engaged by said lip, a movable check-hook, and a returning means for said check-hook, connected therewith and arranged in the chamber in said seat, said re- 95 turning means comprising a spring-drum and means extending through said seat and connecting said drum with said hook.

20. A harness-saddle, comprising a seat and a tree, flanges projecting from one of the 100 same toward the other, a check-hook adapted to move relatively to said saddle and an automatic returning means for said hook mounted between said seat and tree and sup-

ported by said flanges.

21. A harness-saddle, comprising a seat and a tree, flanges projecting from one of the same toward the other, a check-hook adapted to move relatively to said saddle and an automatic returning means for said hook com- 110 prising a spring-drum mounted between said seat and tree and supported by said flanges.

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

Witnesses:

Josiah B. Gothright, E. S. FOOTE.