

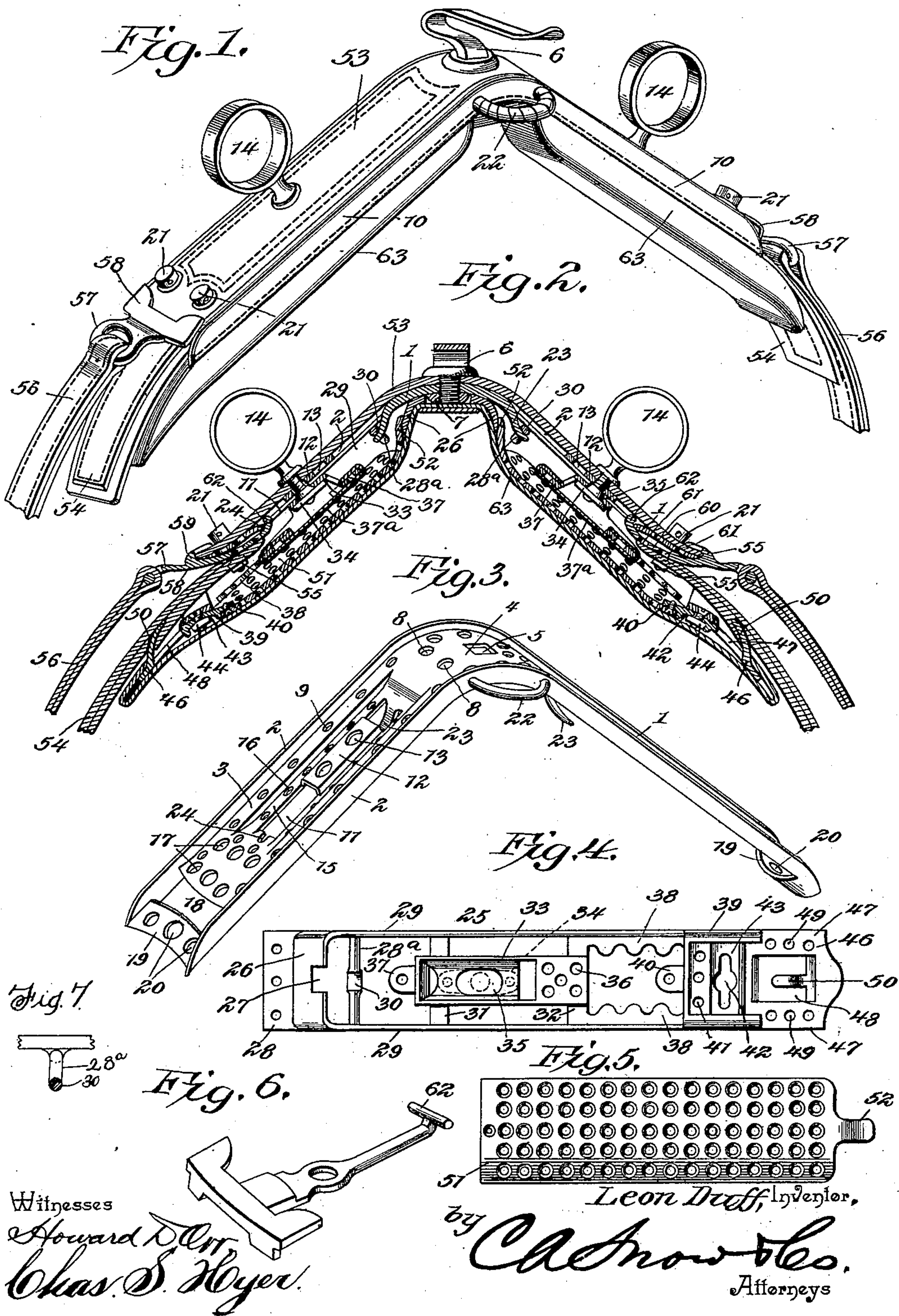
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Patented Dec. 24, 1901.

L. DUFF.
HARNESS SADDLE.

(Application filed Nov. 23, 1900.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

LEON DUFF, OF NASHVILLE, TENNESSEE.

HARNESS-SADDLE.

SPECIFICATION forming part of Letters Patent No. 689,470, dated December 24, 1901.

Application filed November 23, 1900. Serial No. 37,533. (No model.)

To all whom it may concern:

Be it known that I, LEON DUFF, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented new and useful Improvements in Harness-Saddles, of which the following is a specification.

This invention relates to harness-saddles; and the object of the same is to provide a simple and effective device of this character of a strong and durable nature wherein the use of filling-hair or analogous material is dispensed with, a quick and positive assemblage can be obtained, and an easy fastening of the skirt, jockey, and other parts can be attained.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a harness-saddle embodying the features of the invention. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a detail perspective view of the tree or top plate. Fig. 4 is a top plan view of the bottom plate. Fig. 5 is a plan view of the pad-forming plate applied to the under portion of the bottom plate. Fig. 6 is a detail perspective view of a modified form of pad-tip. Fig. 7 is a detail longitudinal section of a portion of the bottom plate.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates the top plate, which is formed of suitable metal and bowed, as usual, in consonance with the bow of the saddle or pad as a whole and has vertical flanges 2 extending full length of the opposite sides thereof and with the intermediate body 3, forming upper and lower seats for the reception of the devices applied thereto. The body 3 has an upper seat 4, with a central opening 5 for the passage therethrough of the shank or stem of the check-hook or like device 6, which is engaged by a nut 7, applied against the under side of the seat, as shown by Fig. 2. Around the opening 5 a plurality of smaller openings 8 are arranged to receive fastenings of a suitable character to maintain the parts applied to the tree in fixed relation thereto. In the body adjacent

the flanges 2 are lines of apertures or openings 9 to receive the fastenings for the edge covering 10 of the tree or top plate, and extending longitudinally of the body inside of the said apertures or openings 9 are slots 11, centrally spanned by upstruck or upwardly-projecting bridges 12, one for each slot, the said bridges being formed with openings 13 to receive the shanks or fastening devices of the terret-rings 14. The portions of the body forming margins for the said slots 11, as at 15, are depressed and formed with lines of openings 16 to receive the fastenings of what are known as "hand-made" pads. By depressing the portions of the body forming the margins of the slots 11 the bridges 12 are given ample proportions to serve their intended purpose, but prevented from having too great upward extent to avoid interfering in the least with the seat characteristics of the upper side of the top plate. Below the slots 11 a plurality of openings 17 are formed for securing purposes and also to lighten the structure of the body of the top plate, the said latter openings providing means, in the first instance, for the introduction of fastening devices in the construction of different varieties of saddles or pads. Extending transversely of the body, adjacent to the lower terminals thereof and between the side flanges, are slots 18, which provide terminal seat members 19, depressed to permit parts hereinafter set forth to be readily inserted in the slots 18 thereover and having openings therein, as at 20, for the passage therethrough of fastening-screws 21, two being shown in the present instance, though one or three could be equally well employed, the said terminal seats being concaved for the purpose of receiving a correspondingly-curved portion of pad-tips, as shown by Fig. 2 and more fully hereinafter referred to. From the rear flange of the body a back-strap loop 22 projects, and from the upper end walls of the slots 11 hooks 23 extend downwardly to interlock with portions of a bottom plate, the lower end walls of the slots being formed with recesses 24 to provide seats.

The bottom plate 25 is practically of a skeleton or open construction to lighten the same and to provide for application to the top plate 1 and has its inner end 26 inclined and provided with a central slot 27 and an apertured

lip 28 for receiving fastening devices, the said lip being normally located under the seat 4 of the top plate, as shown by Fig. 2. Adjacent to the end 26 a cross-bar 28^a connects the sides 29 of each bottom plate and has an upwardly-extending central portion 30 to receive the hook 23 of the top plate, as shown by Fig. 7, it being understood that the bottom plates are of duplicate construction and applied to the under side of the top plate on opposite sides of the center of the latter. Below the cross-bar 28^a two spaced cross-bars 31 and 32 are integrally formed with and hold a nut-box 33 between the sides 29, the said box being open at the bottom to receive a nut 34, having a central screw-socket and opposite diametrically-disposed wings, the nut having a loose movement in the box, but prevented from rotating, so that the screw-shank of the terret-ring can be readily screwed thereinto through an aperture 35 in the upper or top portion thereof. This nut-box extends upwardly into the bridge 12 of the top plate, and at one end the box is formed with a series of openings 36 to lighten the structure and also to receive fastenings when the parts are used with different forms of pads or attachments in producing variations in the saddle. The portion of the box which directly holds the nut is provided with a partial top covering, and the remaining part is open for convenience in placing the nut in position from above, and at the upper terminal of the box is a central-apertured projection 37, to which is secured a bottom covering 37^a for the nut-box and serves to prevent the nut in the event of detachment of the same, as when disconnecting the terret-ring, from moving down under the bottom plate and rendering it difficult to afterward remove the same, said covering being preferably formed of thin leather or other material and secured at its lower end by being bent over the end of the box having the openings 36 therein and fastened by tacks or other devices. Below the cross-bar 32 are opposite inwardly-projecting guards 38, which are horizontally disposed and formed with scalloped edges, and at the lower terminals of the said guards is a cross-web 39, having the edge thereof adjacent to the said guards bent downwardly and formed with a central-apertured projection 40, a plurality of openings 41 in the body thereof for fastening devices, and an enlarged opening 42, with diametrically-disposed slots over a nut-seat 43 in the bottom of the said cross-web to receive a nut 44, similar to that disposed in the box heretofore described. When the bottom plates are applied to the opposite sides of the under portions of the top plate, the sides 29 thereof fit partially within the flanges 2, and in the under portion of each bottom plate a seat-recess 45 is formed, for a purpose which will be more fully hereinafter set forth. The bottom plate is also formed with a terminal member 46, having side flanges 47, a central slot 48, opposite lines of openings

49, and an upwardly and inwardly projecting hook 50. The openings are to receive tacks or analogous fastenings, and the purpose of the hook will presently appear. To the bottom portion of each plate 25 and fitted in the recess 45 thereof is a concavo-convex pad-plate 51, which is formed with a plurality of perforations extending almost over the full dimensions thereof and has an upstruck tongue 52 at one end to enter the slot 27 in the inner end of the bottom plate. The opposite outer end of the pad-plate fits snugly against the end wall of the recess 45, so that there will be a flush coincidence of the edges of the sides and ends of the said pad-plate with the adjacent portions of the bottom plate. The pad-plates are concaved in a longitudinal direction in order to properly shape the bearing portion of the saddle, and by perforating the said pad-plates the entire saddle structure is prevented from heating rapidly and becomes cool more readily. The interior of the saddle is hollow or open, as shown by Fig. 2, and it is unnecessary to use a filling for the same of hair or any other material.

Over the upper side of the top plate the jockey 53 is disposed and secured in place by the trimmings, such as the check-hook, terret-rings, and screws 21. The flanges 2 and the ends of the top plate are covered in the present instance by leather or analogous material and inserted through the terminal slots 18 of the tree, and over the depressed seats 19 of the latter are the inner ends of the skirts 54, which project downwardly any suitable distance, nuts or screw-seats 55 being carried by and secured to the said skirts at their inner ends for engagement by the screws 21, which pass through the openings in the body of the top plate adjacent to the slots 18 and above the latter. The tug-straps 56 are attached to loops 57 of pad-tips 58, the latter being shouldered, as at 59, to have a portion thereof project over the ends of the jockey and provide seats for said ends to prevent them from curling or becoming worn and also to produce an ornamental finish. The tips also have flat shanks 60, formed with a pair of eyes 61 to receive fastening devices, if desired, and terminate in T-heads 62, which catch in the recesses 24 of the body of the top plate, and when all the parts are properly assembled these tips serve to firmly hold the tug-straps in secured relation to the saddle or pad. The form of tip shown by Fig. 6 is for use on a saddle or pad employed in connection with another style of harness not requiring the use of tug-strap loops, and consequently the loop 57 is dispensed with and the tip becomes a terminal trimming for the saddle and a holding-seat for the jockey-terminal on each side. The skirts 54 are also held down in proper position by the hooks 50, which penetrate the same from the bottom, as shown by Fig. 2, and by this means curling of the skirts is prevented. The outer ends of the pad-plates are also secured to the

bottom plates by fastenings extending there-
through and through the apertured projec-
tions 40 of the bottom plates, and the guards
38 prevent the inner extremities of the skirts
5 from sinking or extending downwardly too
far in the assemblage of the parts. The
united bottom and pad plates are sheathed
by a covering 63 of suitable material, and by
angularly extending the inner upper ends of
10 the bottom plates the customary central arch
can be readily produced in the pad to fit over
the back and neck-bone of the animal.

While it is preferred to use cast or bent
metal for forming the several plates, it is also
15 intended at times to use wood, papier-mâché,
strawboard, or general pulp products, and by
the interlocking assemblage of the several
parts as set forth a great saving in hardware,
fastening-tacks, and the expense of manufac-
20 ture results. By means of this single struc-
ture a great variety of changes in the style
and character of saddles can be produced.

Any kind of a straight or swell pad can be
produced by the use of the improved devices,
25 and the durability and general strength of
the saddle are materially increased.

The invention is not limited to the exact
trimmings shown by the drawings, and the
contour of the several parts may be changed
30 without departing from the principle of the
invention, and likewise the size and propor-
tions may be varied.

Having thus described the invention, what
is claimed as new is—

35 1. A harness-saddle comprising a top plate,
bottom plates connected to the under oppo-
site portions thereof and forming hollow or
open spaces therewith, concavo-convex per-
forated pad-plates directly applied and con-
40 nected to the under portions of the bottom
plates, and coverings and trimmings for the
said plates, said coverings consisting of thin
padless material fully inclosing the plates,
whereby the saddle is given the desired pad
45 projection without the use of filling material.

2. A harness-saddle comprising a top plate
having opposite integral downwardly-in-
clined portions extending from a central ele-
vated arched portion, separate bottom plates
50 applied to the under side of the opposite in-
clined portions of said top plate and having
their inner upper ends removably connected
to the latter, concavo-convex perforated pad-
plates removably and snugly held against the
55 under sides of the bottom plates, and a cov-
ering for said parts.

3. A harness-saddle comprising a top plate,
bottom plates removably applied to the under
sides of the opposite portions of the top plate
60 and having upwardly and inwardly project-
ing hooks at the lower ends thereof below the
opposite terminals of the top plate, a cover-
ing for said parts, and skirts having the in-
ner upper extremities thereof inserted be-
65 tween the terminals of the top plate and the
adjacent portions of the bottom plates and
caught by the hooks of the latter.

4. A harness-saddle having a top plate with
upper downwardly-extending hooks and lower
slots and depressed terminal seats, bottom 70
plates on the opposite portions of the top
plate having the upper inner ends provided
with cross-bars having upwardly-extending
central portions to removably receive the said
hooks, pad-tips inserted in said slots and seats 75
of the top plates, and fastening devices for
the lower ends of the plates.

5. A harness-saddle having a top plate, in-
dependent bottom plates removably applied
to opposite sides of the lower portion thereof, 80
the upper ends of the bottom plates being in-
clined and slotted, independent pad-plates
fitted against the lower portions of the bot-
tom plates and having upstruck tongues to
removably engage the slotted ends of the lat- 85
ter plates, and means for securing the ends of
the pad-plates opposite to the ends thereof,
having the said tongues.

6. A harness-saddle having a top plate with
a body and side flanges, the body having op- 90
posite slots and bridges with openings there-
through, bottom plates with nut-boxes fitted
upwardly against the bridges, nuts in the said
boxes, and terret-rings or the like having
shanks passing through the bridges and boxes 95
into the nuts in the latter, the several parts
having coverings.

7. A harness-saddle having a top plate with
lower slots and depressed seats below the lat-
ter, said seats being below the under side of 100
the said top plate, plates applied to the un-
der side of the same, and saddle-tips having
shanks inserted through the said slots and
provided with T-heads terminally caught by
portions of the said top plate. 105

8. A harness-saddle or the like having a tree
or top plate with lower slots and depressed
seats and recesses higher up in the side por-
tions of the tree than the said slots, and sad- 110
dle-tips having shanks inserted through the
said slots and provided with inner terminal
T-heads to engage the said recesses.

9. A harness-saddle having a tree or top
plate with lower slots, bottom plates having
seat members below said slots, skirts having 115
extremities inserted through said slots and
carrying nuts or screw-receiving devices, sad-
dle-tips to which the tug-straps are attached
also having portions inserted through said
slots, bottom and pad plates applied to the 120
said top plate, a covering for the bottom and
pad plates, a jockey on the top plate, and
screws passed through the lower terminal
portions of the jockey and into the nuts or
screws carried by the inner extremities of the 125
skirts, portions of the saddle-tips extending
over the jockey ends.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

LEON DUFF.

Witnesses:

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G. A. KINNEY.