March 11, 1969 F. P. BRILANDO 3,432,204

UNICYCLE SADDLE

Filed Aug. 24, 1967

Fig. 1.

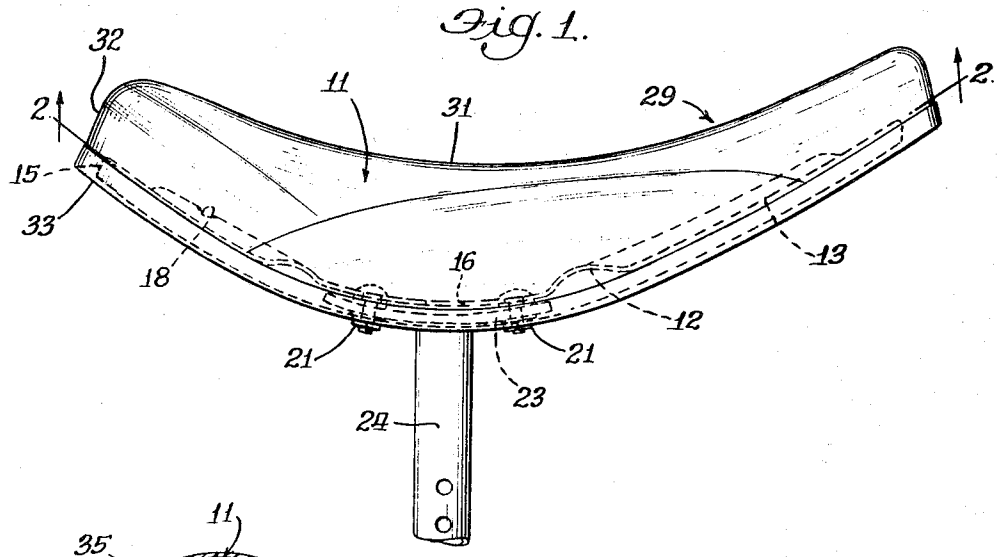


Fig. 2.

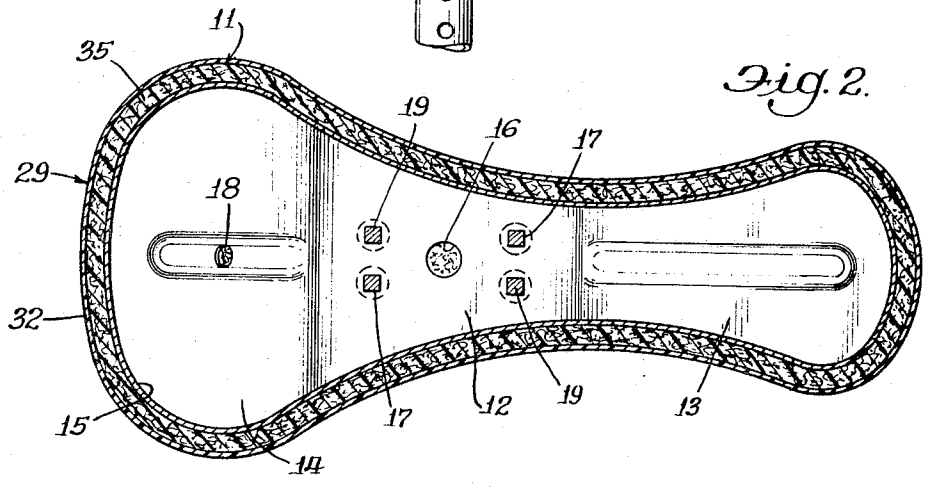
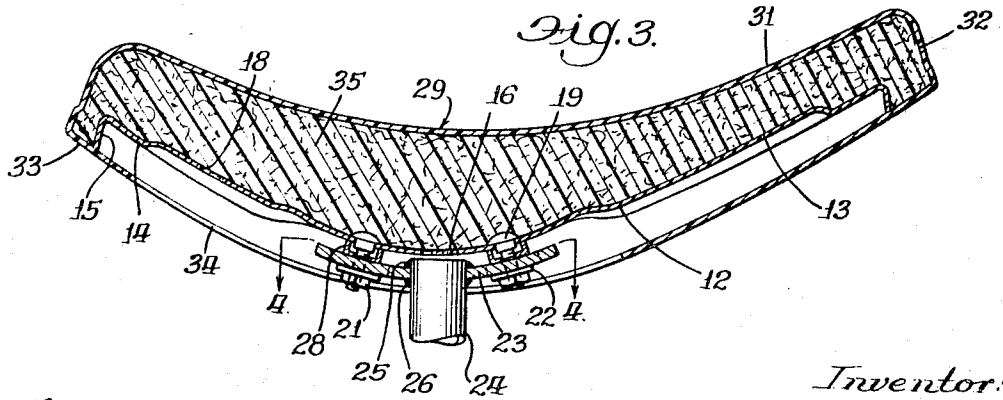


Fig. 3.



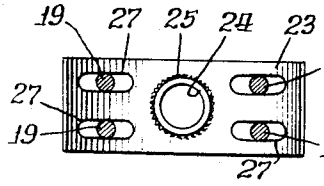


Fig. 4.

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UNICYCLE SADDLE

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Int. Cl. B62j 1/02, 1/08, 1/26

ABSTRACT OF THE DISCLOSURE

Unicycle saddle with curved base plate and mounting plate of same curvature welded to seat post and adjustably secured to base plate to facilitate varying longitudinal and angular adjustments of saddle, with latter having laterally flaring front and rear end portions formed by vinyl cover peripherally engaging base plate and padding interposed therebetween by introducing polyurethane foam through an aperture in the base plate.

BACKGROUND OF THE INVENTION

Field of the invention

This invention relates in general to unicycles and more particularly to a novel saddle construction and arrangement therefor.

Description of the prior art

It has been customary to employ clamps of various types for attaching the saddle to the seat post of a unicycle, generally to provide for vertical adjustments only of unicycle saddles, and to make unicycle saddles of substantially uniform width throughout their length.

SUMMARY OF THE INVENTION

For greater comfort and better control and riding qualities, this invention comprises a unicycle saddle having laterally flared front and rear end portions, and one which is readily adjustable longitudinally and angularly relative to the seat post, which is vertically adjustable in the usual manner. Maximum strength and rigidity of the saddle supporting structure is attained by providing a mounting plate which is welded to the seat post to eliminate the prior art clamps and which, in order to enable the novel longitudinal and angular adjustments to be effected, has the same longitudinal curvature as that of a curved saddle base plate to which it is secured by suitable bolt and slot connections. The saddle is completed by a cover, preferably of vinyl, peripherally engaging the base plate, and foamed padding interposed between the cover and the base plate by introducing suitable foamed material, such as polyurethane foam, through an access aperture in the base plate.

In the drawings:

FIGURE 1 is a side elevational view of a unicycle saddle embodying the features of the invention;

FIG. 2 is a sectional view, in the nature of a bottom plan view, as taken substantially on the line 2—2 of FIG. 1;

FIG. 3 is a vertical section extending longitudinally of the saddle; and

FIG. 4 is a detail horizontal section taken substantially on the line 4—4 of FIG. 3.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring more particularly to the drawings, reference numeral **11** indicates in general a unicycle saddle comprising a longitudinally curved metal base plate **12** which is laterally flared outwardly at its front and rear portions **13** and **14**, respectively, as best seen in FIG. 2, and is provided with depending marginal flanges **15**, as

shown in FIG. 3. In addition to the base plate **12** being curved to present the end portions **13** and **14** as upwardly sloping parts, it may be embossed or stamped to provide suitable strengthening ribs, or the like, has a substantially centrally disposed aperture **16**, four square apertures **17** spaced from the latter as best shown in FIG. 2, and an access aperture **18** through the rear portion **14**.

Extending through each of the square apertures **17** is a carriage bolt **19** having a square neck portion engaged by the associated said aperture and with its head abutting against the upper surface of the base plate **12**. These bolts **19**, together with suitable nuts **21** and lock washers **22**, best seen in FIG. 3, adjustably secure the base plate **12** on a metal mounting plate **23** having the same longitudinal curvature as the base plate **12**.

This mounting plate **23** is provided with a central aperture to receive the upper end of a seat post **24** which extends therethrough in the manner shown in FIG. 3. The relative positioning of the seat post **24** and the mounting plate **23** enables the post to be welded to the metal plate along both side surfaces of the latter, as at **25** and **26**. The mounting plate **23** also is provided with four slots **27** (FIG. 4) so disposed as each to receive one of the bolts **19**.

It will be observed that when the base plate **12** is mounted on the mounting plate **23** as shown in FIG. 3, the upper end of the seat post **24** engages the lower surface of the base plate and separates those plates a predetermined distance from each other. Means therefor are provided for maintaining the end portions of the mounting plate **23** that same predetermined distance from the base plate **12** when the nuts **21** are tightened to effect clamping engagement of the base plate on the mounting plate. Any suitable means for accomplishing this function may be employed, such as the forming of the longitudinal ends of the mounting plate **23** as upstanding flanges, but in the illustrated embodiment, this is accomplished by suitable spacer washers **28** mounted on the bolts **19** and interposed between the plates **12** and **23**. By virtue of the slots **27** extending longitudinally of the plates, loosening and subsequent tightening of the nuts **21** permits relative longitudinal adjustments between the plates **12** and **23** and varying of the angular disposition of the base plate **12** relative to the seat post **24**.

To complete the saddle **11**, a cover, indicated generally by reference numeral **29**, preferably formed from a suitable vinyl material, is provided which is shaped in plan similar to but larger than the base plate **12** and comprises a top wall **31**, substantially vertical marginal walls **32**, and a bottom portion **33**, all formed integrally in well-known manner. The bottom portion **33** is provided with a central aperture **34** (FIGURE 3) extending over the major part of the rear portion thereof and forwardly to a point adjacent the rear end of the outwardly flared front portion of the cover. The aperture **34** thus enables the cover **29** to be mounted on the base plate **12** by permitting the latter to be inserted therethrough into a position between the top wall **31** and the bottom portion **33** of the cover, it being understood that the vinyl or other material employed in making this cover **29** is readily flexible which simplifies such assembly of these parts.

After the cover **29** has been so disposed on the base plate **12**, the saddle **11** is completed by introducing foam material, preferably polyurethane foam, through the access aperture **18** which forms a foamed padding **35** interposed between the cover **29** and the metal base plate **12**. It will be appreciated that upstanding flanges or lips may be folded or otherwise formed as a part of the bottom portion **33** of the cover **29**, if desired, to insure proper initial positioning of the cover on the base plate **12** before such introduction of the foamed padding material. In any event,

the nature of the cover **29** and the vinyl or other material from which it is made is such that the foamed material will be prevented from escaping from the space between the cover and the base plate as it is being introduced thereto through the access aperture **18**. It will also be appreciated that this access aperture **18** and the aperture **16** in the base plate **12**, which in the mounted position of the parts as shown in FIG. 3 is disposed substantially in alignment with the seat post **24**, will function as breather holes during compressive movements imposed upon the padding **35** in use by the rider, and the making of the cover **29** substantially larger in plan than the base plate **12** provides a substantial buffer or protective bumper portion around the entire periphery of the metal base plate.

In addition to the longitudinal and angular adjustments which may be effected of the saddle relative to the seat post **24**, as previously noted, vertical adjustments of the saddle also may be made in well-known manner, as by means of the usual spaced apertures in the seat post as shown in FIG. 1.

It is thought that the invention and many of the attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, constructions, and arrangement of parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

We claim:

1. A unicycle saddle comprising a longitudinally curved metal base plate having upwardly sloping and laterally flaring end portions, a metal mounting plate having the same longitudinal curvature as said base plate, means for releasably securing said plates together to facilitate relative longitudinal adjustments therebetween, a seat post welded to said mounting plate, whereby said relative adjustments result in varying the angular disposition of said base plate relative to said seat post, said means comprising a plurality of bolts extending through suitable apertures in said base plate and longitudinally extending slots in said mounting plate, and said mounting plate being

provided with a central aperture through which the upper end of said seat post extends to enable the welding of the latter to said mounting plate at both sides thereof.

2. In a unicycle saddle according to claim **1**, wherein the upper end of said seat post separates said plates for a predetermined distance, additional means for maintaining the end portions of said mounting plate said predetermined distance from said base plate.

3. In a unicycle saddle according to claim **1**, a cover peripherally engaging said base plate, and padding interposed between said cover and said base plate, wherein said base plate is provided with an access aperture extending therethrough, and said padding comprises foamed material introduced through said access aperture.

4. A unicycle saddle according to claim **3**, wherein said base plate is provided with depending marginal flanges, and said cover has an apertured bottom portion for receiving said base plate and engageable with said depending marginal flanges.

5. In a unicycle saddle according to claim **2**, a vinyl cover peripherally engaging said base plate, said base plate having an access aperture extending therethrough, and padding interposed between said cover and said base plate comprising polyurethane foam introduced through said access aperture.

References Cited

UNITED STATES PATENTS

478,184	7/1892	Zimmer	297—215
583,445	6/1897	Beck	297—215
2,801,199	7/1957	Meyers	297—214 X
2,802,766	8/1957	Leverenz.	
3,258,290	6/1966	Karbin	297—203 X
3,264,034	8/1966	Lawson	297—458

FOREIGN PATENTS

248,751	1/1926	Italy.

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U.S. Cl. X.R.

297—215