

United States Patent

[11] **3,533,355**

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| [45] | Patented | Oct. 13, 1970 |
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New York, New York
a corporation of New York
Continuation-in-part of application Ser. No.
531,208, March 2, 1966, now abandoned.
This application Feb. 13, 1967, Ser. No.
615,551 |

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| [56] | | References Cited | |
| | | UNITED STATES PATENTS | |
| 427,365 | 5/1890 | Robischung..... | 101/415.1 |
| 1,640,347 | 8/1927 | Chisholm | 101/383X |
| 2,045,408 | 6/1936 | Read | 101/415.1X |
| 2,157,621 | 5/1939 | Neilson | 101/415.1X |
| 2,966,848 | 1/1961 | Faeber | 101/415.1 |
| 2,990,000 | 6/1961 | Mangus, et al. | 29/243.57 |
| 3,218,970 | 11/1965 | Heimlicher, et al. | 101/415.1X |
| | | FOREIGN PATENTS | |
| 237,028 | 7/1925 | Great Britain | 101/415.1 |
| 959,513 | 6/1964 | Great Britain | 101/415.1 |

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|------|------------------------------------|--|
| [54] | PRINTING PLATE SADDLE | |
| | 21 Claims, 12 Drawing Figs. | |
| [52] | U.S. Cl..... | 101/415.1 |
| [51] | Int. Cl..... | B41f 27/14 |
| [50] | Field of Search..... | 101/415.1,
378, 382, 383; 29/118; 346/138 |

ABSTRACT: A curved saddle construction for mounting a printing plate onto the cylinder of a printing press having an adjusting bar at one or both ends for aligning the printing plate on the saddle both longitudinally and angularly of its arcuate surface for registry purposes and locking it in this position under a desired degree of tension.

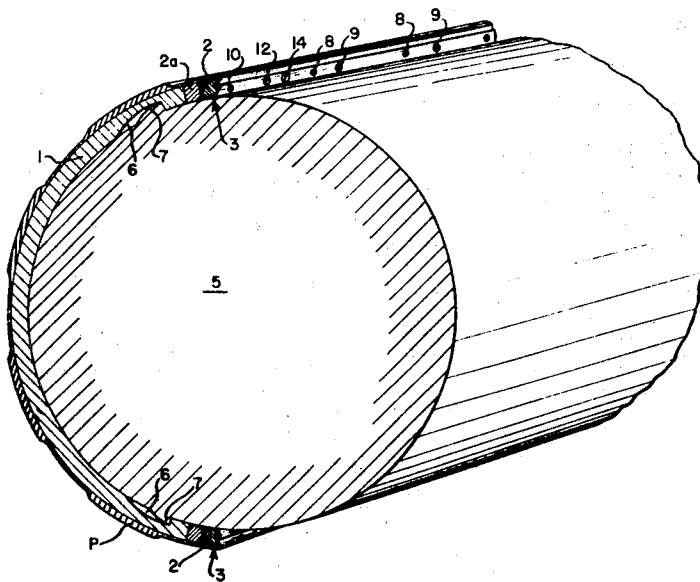


FIG. 1

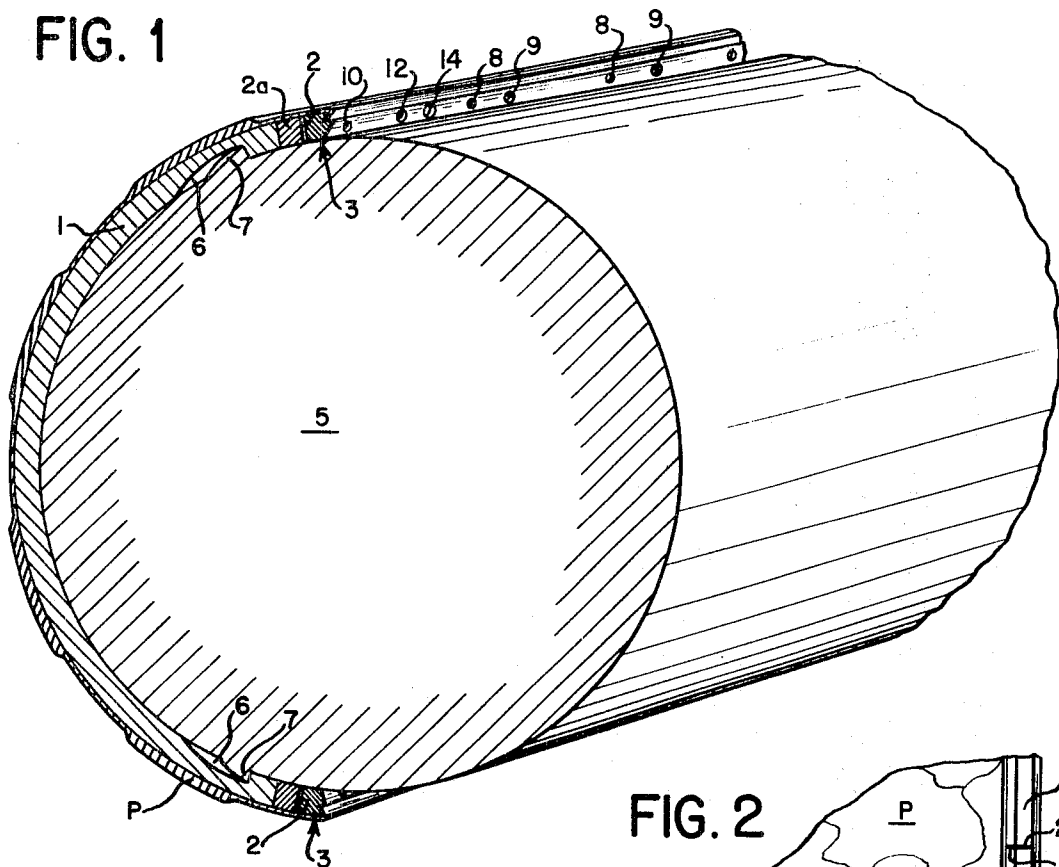


FIG. 2

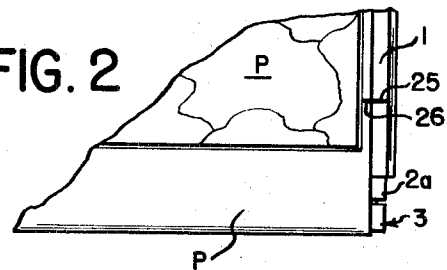


FIG. 4

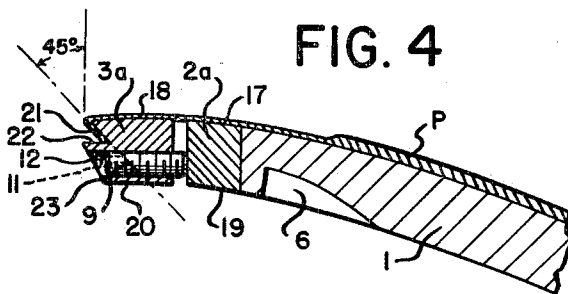
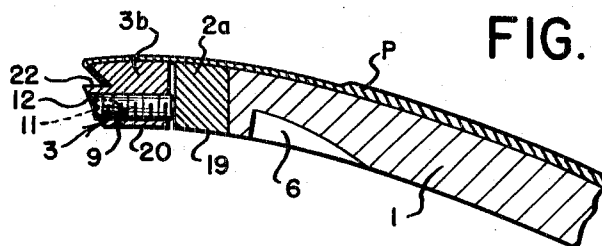


FIG. 5



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FIG. 3

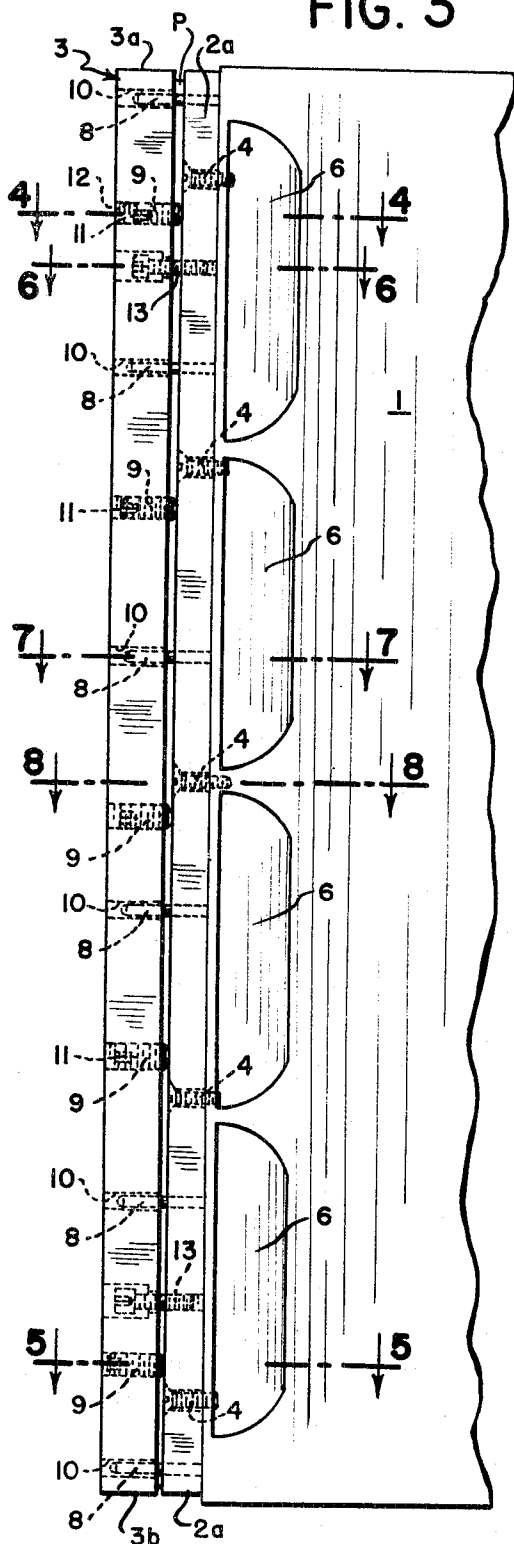


FIG. 6

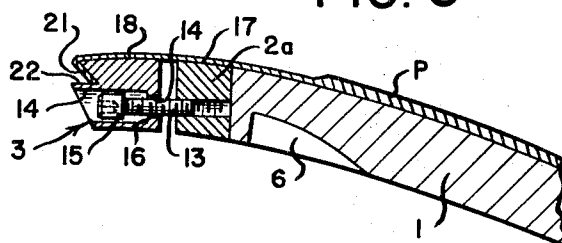


FIG. 7

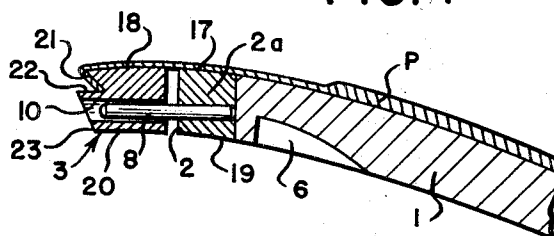


FIG. 8

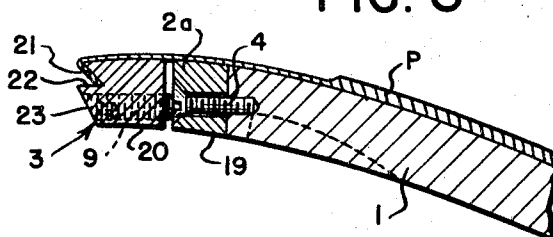
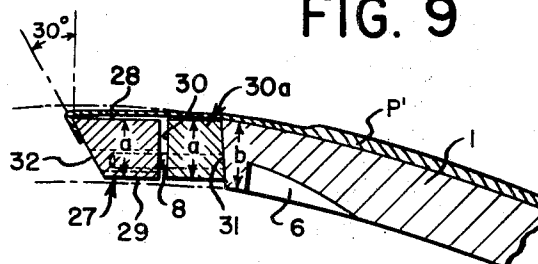


FIG. 9



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FIG. 10

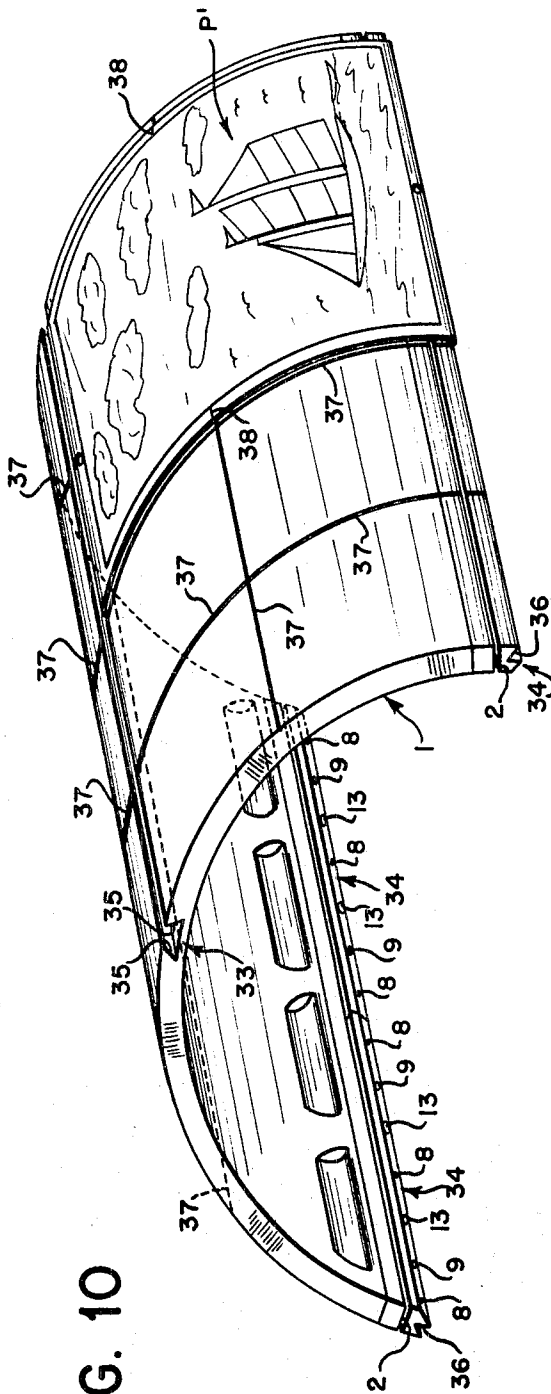


FIG. 11

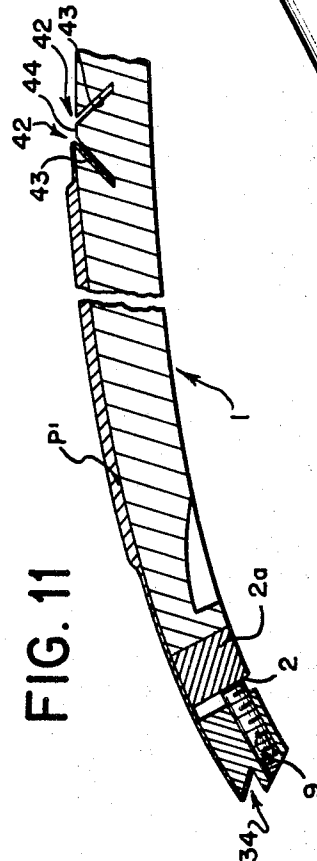
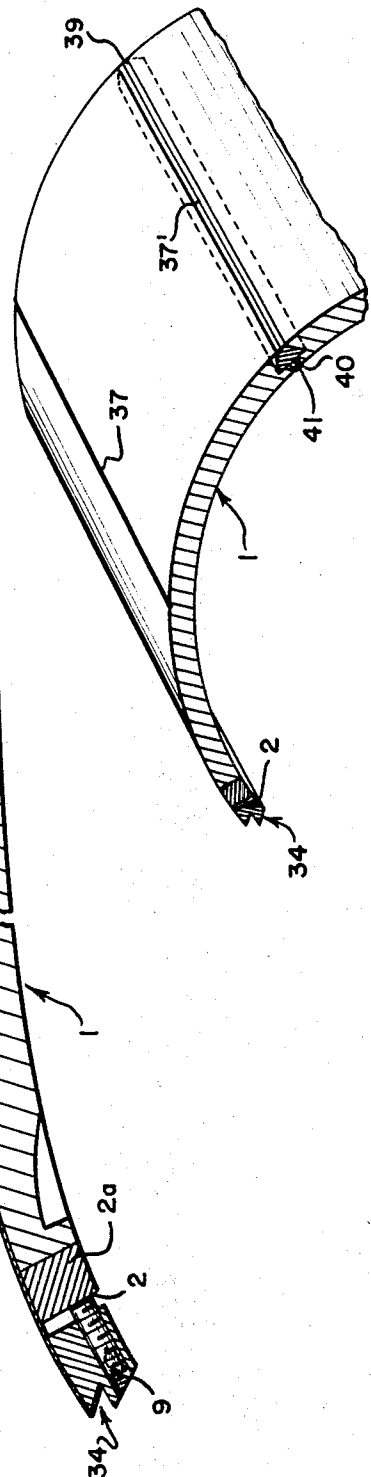


FIG. 12



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PRINTING PLATE SADDLE

CROSS REFERENCE TO RELATED APPLICATION

The present application is a continuation-in-part of applicant's copending application, Ser. No. 531,208, filed Mar. 2, 1966 now abandoned, and entitled "Printing Plate Saddle."

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention pertains to supports for attaching printing plates onto the cylinder of a printing press and more particularly to a printing plate saddle constructed with an adjusting mechanism for aligning printing plates on the supporting surface of the saddle and for locking them thereon under the desired degree of tension.

2. Description of the Prior Art

Recently, there has been an increased demand on the part of advertisers for both high quality black and white and color advertising in newspapers which is comparable with that found in magazines where etched or engraved printing plates are used. Conventional newspaper presses, however, presently employ lead stereotype printing plates which have known limitations as to the quality of black and white and color printing caused by the inherent characteristics of the plates. One approach to meeting the demand for higher quality printing has been for the advertisers themselves to supply the newspaper with preprinted pages containing the desired advertisement for inclusion in the newspaper; while another approach has been for the newspaper publishers to substitute for the stereotype plates premade engraved plates designed for connection onto the printing cylinder by a separate saddle mechanism.

With presently available saddles constructed for receiving engraved plates, a double faced adhesive tape or a separate adhesive is conventionally employed for attaching the plate onto the outer curved surface of the saddle. The use of adhesive permits relatively quick attachment of the plate onto the saddle but prevents subsequent adjustment of the plate relative to the saddle supporting surface since once the adhesive makes contact between the plate and saddle, it effects a bonding which cannot be readily disturbed. Thus, once the plate has been attached, it cannot be adjusted to correct for any misalignment. With black and white printing, such misalignment is not necessarily of critical importance; but where color printing is involved, with more than one color plate being used in the printing operation, accurate registration of the individual plates on their respective saddles is of extreme importance. With the presently available saddles where the plate, once attached thereto, cannot be readily adjusted, it is difficult to obtain such accurate registration; and even with a skilled and experienced workman, considerable time and effort must be expended to effect initial attachment of the plates to the saddles in proper registration.

SUMMARY OF THE INVENTION

In accordance with the teachings of the present invention, engraved plates and mounting saddles are used instead of the conventional stereotype plates; and the saddles are constructed in such a way so as to avoid the difficulties encountered with presently available saddles where an adhesive is used for connecting the plate to the saddle. Generally, the advantages of the present invention are obtained with a plate-saddle construction that is provided with a curved saddle body and adjustable clamping members at one or both of its opposite ends for engaging against the inner surfaces of bent over or crimped edges formed on the plate. The clamping members are connected to the ends of the saddle by individual supports which include a plurality of individual adjusting members for moving the members outwardly of the ends of the saddle so as to tension the plate onto the saddle. The individual supports for each of the clamping members, including the adjusting members thereof, are positioned at spaced locations across the end of the saddle and the adjusting members

are constructed for individual manipulation so that the clamping members may each be skewed relative to the ends of the saddle as they are moved outwardly thereof. This, in turn, permits an angular adjustment of the plate on the saddle. The plate and saddle are provided with cooperating registration marks which when aligned by adjustment of the clamping members provide a visual indication that the plate is perfectly squared with respect to the saddle supporting surface.

In assembling the plate onto a saddle, the plate is first placed over the curved body surface of the saddle with its bent over edges wrapped around the clamping members while the clamping members are maintained in an inwardly disposed position relative to the ends of the saddle. The clamping members are then moved outwardly of the ends of the saddle to place the plate under tension and securely lock it onto the saddle. During this outward movement of the clamping members, movement thereof in an angular direction is also effected by individual manipulation of the adjusting members to adjust the angular position of the plate and attain a perfectly squared relationship with the saddle.

The saddle construction in accordance with the teachings of the present invention will fit existing press cylinders in the same manner as conventional stereotype plates with no alterations to the press or method of attachment being necessary. No glue or tacky surfaced tape need be used to hold the plate on the saddle. The plate while held firmly attached to the saddle under drum tight tension can be adjusted angularly on the saddle in accordance with the registration marks provided on the saddle. This controlled movement of the plate while affixed to the saddle makes it possible for a plurality of color plates to be registered or moved to common registration marks on their respective saddles, and this may be done either while the saddles are off the printing press or while on the press. Registration of the plate to the saddle while both are off the press allows the press to be printing another job during such adjustment. This, in turn, greatly reduces the amount of press downtime required to register the plates and accordingly, shortens the overall change-over time and produces a subsequent gain in press output of printing production over conventional plate-saddle or stereotype arrangements.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a partial perspective view of the saddle of the present invention mounted on a press cylinder with the printing plate locked on its outer surface;

FIG. 2 is a partial plan view of the saddle and plate as shown in FIG. 1;

FIG. 3 is a partial plan view of the under surface of the saddle showing the clamping member skewed relative to the end of the saddle;

FIG. 4 is a cross-sectional view taken along lines 4-4 of FIG. 3;

FIG. 5 is a cross-sectional view taken along lines 5-5 of FIG. 3;

FIG. 6 is a cross-sectional view taken along lines 6-6 of FIG. 3;

FIG. 7 is a cross-sectional view taken along lines 7-7 of FIG. 3;

FIG. 8 is a cross-sectional view taken along lines 8-8 of FIG. 3;

FIG. 9 is a partial cross-sectional view of a modified embodiment of the saddle of the present invention;

FIG. 10 is a perspective view of a modified embodiment of the saddle of the present invention adapted for receiving partial page plates;

FIG. 11 is a perspective view of the saddle shown in FIG. 10 adapted for receiving a full page plate; and

FIG. 12 is a partial cross-sectional view of a modified construction of the saddle shown in FIG. 10.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

As shown in FIG. 1, the saddle of the present invention is generally comprised of a body member 1 having opposite ends 2 and clamping members 3 attached to these opposite ends. As shown in FIGS. 3—8, the opposite ends 2 of the body member are formed by separate pieces 2a and attached to the body member by a plurality of screws 4. It is to be understood, however, that the ends 2 may be formed as an integral part of the body member, if desired. In contour, the saddle is generally curved to fit the curved surface of the printing cylinder 5 to which it is to be attached and is adapted to receive a plate P over its outer surface.

The preferred type of plate used on the saddle of the present invention for producing high quality printing is one which has the printing or other design to be transferred, etched or engraved thereon. Such a plate may, for example, be constructed of flexible or curved polymer plastic with metal backing, a flexible or curved metal, or a thin flexible rubber material with metal backing. Printing plates manufactured by E. I. du Pont de Nemours & Company under the trademark Dycril are presently available and well suited for use on the saddle constructed in accordance with the teachings of the present invention.

The undersurface of the body member of the saddle is provided with saddle scarf notches 6 selective to receive the cooperating tension hooks 7 of the printing cylinder whereby the saddle is locked onto the cylinder. The specific arrangement whereby the saddle is locked onto the cylinder forms no part of the present invention and may, for example, be a compression hook lock-up arrangement rather than the internal tension lock-up construction shown in FIG. 1.

The construction of each end of the saddle including the clamping members and the means for connecting these members to the body member are preferably identical. Accordingly, for purposes of description, reference is made to FIGS. 3—8 which show the construction of one end of the saddle. As shown most clearly in FIG. 3, the clamping member 3 is adjustably connected to the end 2 of the body member by a plurality of support pins 8 and adjusting screws 9. These pins and screws together define an adjustable mounting means with the pins extending outwardly from the body member and into aligned holes 10 in the clamping member and with the adjusting screws threaded into the clamping member and engaging against the end 2 of the body member.

It will be apparent from FIG. 3 that turning of the adjusting screws 9 to effect movement thereof toward the end of the body member 2 will in turn cause the clamping member to slide on the support pins 8 in a direction away from this end. For permitting adjustment of these screws, they are each provided with an allenhead socket 11, access to which is effected through the open end of the threaded holes 12; and to adjust the angular position of the clamping member with respect to the end 2, as may be required to align the plate on the saddle, the individual screws are threaded toward the end 2 of the body member by varying amounts. With particular reference to FIGS. 3, 4 and 5 where the end 3a of the clamping member is shown as being spaced from the end 2 by a larger distance than the end 3b the screws starting from the end 3a and working toward the end 3b would be moved toward the end 2 by progressively decreasing amounts. In order to permit this angular adjustment of the clamping member on the support pins 8, the holes 10 in which the pins are received are drilled to a diameter slightly larger than that of the pins as clearly shown in FIG. 7.

Referring to FIGS. 3 and 6, the outward movement of the clamping member on the support pins is limited by means of a plurality of locking members in the form of screws 13. These screws are threaded into the end 2 of the saddle, extend slidably through cooperating holes 14 in the clamping member and are each provided with an enlarged head 15 adapted to cooperate with an outwardly facing shoulder 16 formed in each of the holes. These clamping screws thus limit the out-

ward movement of the clamping member and prevent it from falling off the end 2.

As shown in FIGS. 1 and 4—8, the outer surface 17 of the members 2a as well as the outer surface 18 of the clamping member 3 are curved so as to form an extension of the outer curved surface of the body member 1. Likewise, the inner surfaces 19, 20, respectively, of the members 2a and 3 are curved to the same degree as the inner surface of the body member. In the preferred construction of the invention, each of the clamping members has a forward clamping surface 21 which is bevelled inwardly at an angle of 45° with respect to a line drawn perpendicular to its curved outer surface. This forward surface 21 extends toward the inner surface of the clamping member a distance sufficient to receive the bent over end of the plate P which is likewise bevelled at a 45° angle. The surface 21 terminates at a ledge 22 while the remaining portion of the forward face of the clamping member is defined by a substantially straight surface 23 which may be either perpendicular to the outer surface of the body member or tapered at an angle preferably smaller than 45° for facilitating the formation of the various holes therein.

When it is desired to position a printing plate on the saddle member, the clamping members 3, or at least one of them, are moved to a position adjacent the ends 2 of the saddle. The plate is then draped over the saddle with the bent over edges received over the forward clamping surfaces 21. The clamping members are then moved outwardly on the support pins 8 through actuation of the adjusting screws 9 to tension the plate upon the outer curved surface of the saddle. During this tensioning, the individual tightening screws 9 are threaded toward the end 2 of the saddle by varying amounts, if necessary, to adjust the angular position of the plate on the saddle until the plate is perfectly squared with respect to the saddle. For purposes of assuring that the plate is, in fact, precisely aligned on the saddle in squared relationship, registration marks are provided on the outer surface of the saddle for cooperating with similar registration marks on the plate P. FIG. 2 shows one such set of marks at 25, 26 at one corner of the saddle and plate; and similar marks, not shown, will be provided at each of the other corners of the assembly or at any other appropriate place, as desired.

FIG. 9 shows a modified embodiment of the saddle constructed according to the teachings of the present invention. As there shown, the clamping member 27 is formed from straight stock material with the surfaces 28, 29 extending parallel to each other. Also, in this embodiment, the member 30a which forms the end 30 of the body member 1 is constructed from straight stock material. Forming these members with straight inner and outer surfaces may, in some cases, be preferred; however, in such situations, the forward surface 31 of the body member 1 will be bevelled a slight amount and the thickness of these members as measured along the direction indicated by the arrow a will be slightly smaller than the thickness of the body member as measured along the direction of the arrow b. With this construction, all portions of both the member 30a and the clamping member 27 will lie wholly within the bounds of the arcs shown in dotted lines which form extensions of the curved inner and outer surfaces of the body member. In this way, the portion of the plate disposed over the members 30a and 27 will not interfere with the printing operation and the lower surfaces of these members will not interfere with the clamping of the saddle onto the printing cylinder.

As shown in FIG. 9, the forward clamping surface 32 of the clamping member is bevelled at a 30° angle and this surface extends fully across the forward face of the clamping member. The plate P' is also provided with crimped ends bevelled at 30° for mating engagement with the clamping surface 32; however, the clamping member shown in FIG. 9 is also suited for receiving a plate bevelled at an angle different from the bevelled angle of the clamping member. For example, a flexible plate bevelled at the same angle as the plate shown in FIGS. 3—8 may be used; and as the clamping member is moved outwardly of the end of the body member, the bent end

of the plate, due to its flexible nature, will gradually bend until it compliments the contour of the clamping member. Also, the clamping member shown in FIG. 9 may be provided with a clamping surface notched into its forward face at a bevel of 45° such as shown in FIGS. 3—8.

In the embodiment of the invention shown in FIG. 10, the saddle is constructed for receiving either a full page, one-fourth page or one-half page plate or a combination of one-fourth and one-half page plates. In this construction, the body member 1 of the saddle is provided with a dovetailed slot 33 extending the entire length of the saddle and disposed centrally of its opposite ends. Also, the single clamping members 3 of the saddle shown in FIG. 1 are replaced by two clamping members 34 at each end of the saddle. These clamping members 34 may be the same as the clamping members 3 shown in FIGS. 1—8 or may be of the type shown in FIG. 9; and in any case, are connected to the associated ends of the body portion of the saddle in the same manner as with the constructions shown in FIGS. 1—9.

The dovetailed slot formed in the saddle shown in FIG. 10 is preferably constructed with its side walls defining clamping surfaces 35 angled to the same degree as the forward clamping surfaces 36 of the clamping members 34. The slot is adapted to receive one of the bent over edges of a partial page plate, such as the one-fourth page plate P' shown in FIG. 10. Upon its insertion, the other bent over edge of the plate is positioned over the forward clamping surface 36 of the aligned clamping member 34 and this clamping member is then adjusted outwardly of the end 2a of the saddle by actuation of the adjusting screws 9 to tension the plate upon the curved underlying surface of the saddle.

For effecting a proper alignment of a partial plate on the saddle, registration marks 37 are provided on its body portion. These marks are formed centrally of each of the saddle sections disposed on opposite sides of the slot, and cooperate with similar registration marks on the partial plates, as for example, the registration marks 38 on the plate P' shown in FIG. 10.

Although a one-fourth page plate P' is shown in FIG. 10 as attached to the saddle, it is to be understood that a one-half page plate may be attached to either section of the saddle which is disposed to one side of the slot 33 of that a one-half page plate extending from one end of the saddle to the other could be used. Also, combinations of one-half page and one-fourth page plates can be attached to the saddle at the same time. In the case where a one-half page plate is positioned on one or both of the sections of the saddle disposed on opposite sides of the slot 33, the single clamping members 3 shown in FIG. 1 may be used instead of the clamping members 34.

With the saddle shown in FIG. 10, it is also possible to attach a single full page plate. However, to provide support for the portion of the full page plate which overlies the slot 33, a dovetailed bar 39 is provided. As shown in FIG. 11, this bar is complimentary in size and shape to the slot 33 and is adapted to be snugly received therein. In order to assure that this bar remains in position, the undersurface of the body portion of the saddle opposite the slot is provided with threaded holes, one of which is shown at 40 in FIG. 11 for receiving set screws 41. In the situation where the saddle will be used with one-half page plates extending from one end of the saddle to the other, two half length bars will advantageously be provided with the saddle so as to provide complete support for these one-half page plates. Also, where either one or two bars are provided, each is constructed with a registration mark 37' for cooperating with the registration marks on the overlying plate in the same manner as the marks 37 cooperate with the marks 38 on the plate P'.

In the embodiment of the invention shown in FIG. 12, the dovetailed slot 33 is replaced by the two angled slots 42 to provide the clamping surfaces 43 angled to the same degree as the forward clamping surfaces of the clamping members 34. This construction eliminates any separate dovetailed bars as shown in FIG. 11 since the portion 44 of the saddle between

the slots 42 provides sufficient support for the overlying portion of the one-half page or full page plate.

The description of the present invention as given above is of certain preferred embodiments; however, it is to be understood that various changes may be made thereto without departing from the scope of the invention as set forth in the following claims.

I claim:

1. A saddle for mounting a printing plate with bent over opposite ends onto a printing cylinder comprising:
 - a. a body member having curved outer and under surfaces adapted to be locked onto the curved supporting surface of the printing cylinder and having opposite ends extending across the supporting surface of the cylinder in a direction parallel to the longitudinal axis thereof;
 - b. an adjustable plate clamping member connected to at least one of the opposite ends of said body member and extending thereacross, each of said clamping members having curved outer and under surfaces forming extension of the curved outer and under surfaces of said body member and having a clamping surface on the side thereof facing away from the associated end of the body member and over which the bent end of the plate is adapted to be received; and
 - c. adjustable mounting means extending through each of said plate clamping members and into the associated end of the body member for connecting each of said clamping members onto the associated end of the body member for movement toward and away therefrom from a first position immediately adjacent said end where the plate may be loosely attached to said saddle with its bent over ends received over said clamping surface to a second position spaced from the end of said body member to securely lock said plate onto the saddle under tension.
2. A saddle according to claim 1 wherein:
 - a. adjustable plate clamping members are connected to both of the opposite ends of said body member; and
 - b. adjustable mounting means are provided for each of said clamping members.
3. A saddle according to claim 2 wherein:
 - a. said adjustable mounting means include:
 1. A plurality of support pins extending outwardly from each end of said body member and slidably received within said clamping members; and
 2. A plurality of adjusting members movably secured to said clamping members for movement toward and away from said opposite ends and engaging against said opposite ends at spaced locations thereacross.
4. A saddle according to claim 3 wherein:
 - a. said support pins are received within cooperating openings in said clamping members with a clearance between each of said pins and the wall surfaces of the cooperating opening; and
 - b. the adjusting members secured to each clamping member are mounted independently of each other for selective independent movement toward and away from the associated end of said body member.
5. A saddle according to claim 4 wherein: the outer surface of said body member includes registration means on the portion thereof outside the portion covered by said plate adapted to cooperate with registration means on said plate for accurately aligning said plate on said outer surface upon selective independent movement of said adjusting members.
6. A saddle according to claim 5 wherein: each of said adjusting members is comprised of a set screw threadably secured to its associated clamping member with one end thereof engaging against the associated end of said body member.
7. A saddle according to claim 6 wherein: each of said clamping members is provided with openings on the side facing away from the associated end of said body member for permitting access to the opposite end of said set screws.
8. A saddle for mounting printing plates with bent over opposite ends onto a printing cylinder comprising:

- a. a body member having curved outer and under surfaces adapted to be locked onto the curved supporting surface of the printing cylinder and having opposite ends extending across the supporting surface of the cylinder in a direction parallel to the longitudinal axis thereof;
 - b. adjustable plate clamping members connected to the opposite ends of said body member and extending thereacross, said clamping members each having exposed outer and under surfaces disposed within the curved boundary formed by lines extending along the outer and under surfaces of said body member and a clamping surface on the side thereof facing away from the end of the body member to which it is connected and over which the bent end of a plate is adapted to be received;
 - c. adjustable mounting means extending through said plate clamping members and into the associated end of the body member for connecting said clamping members onto the opposite ends of the body member for movement toward and away therefrom from a first position immediately adjacent said ends where the plate may be loosely attached to said saddle with its bent over ends received over said clamping surfaces to a second position spaced from the ends of said body member to securely lock a plate onto the saddle under tension; and
 - d. slot means in the curved outer surface of said body member disposed centrally of the opposite ends thereof and extending across said body member in a direction parallel to the opposite ends thereof and with the sides of said slot means defining two clamping surfaces facing away from the clamping surfaces of the opposite plate clamping means.
9. A saddle according to claim 8 wherein:
- a. the clamping surface of each of said clamping members is bevelled inwardly toward the associated end of the body member at an acute angle relative to the upper surface thereof; and
 - b. each of said clamping surfaces of said slot means is bevelled toward the end of the body member nearest to it at an acute angle equal to the bevelled angle of the clamping surfaces of the clamping members.
10. A saddle according to claim 9 wherein:
- a. said adjustable mounting means include:
 1. a plurality of support pins extending outwardly from each end of said body member and slidably received within said clamping members; and
 2. a plurality of adjusting members movably secured to said clamping members for movement toward and away from said opposite ends and engaging against said opposite ends at spaced locations thereacross.
11. A saddle according to claim 10 wherein:
- a. said support pins are received within cooperating openings in said clamping members with a clearance between each of said pins and the wall surfaces of the cooperating opening; and
 - b. the adjusting members secured to each clamping member are mounted independently of each other for selective independent movement toward and away from the associated end of said body member.
12. A saddle according to claim 11 wherein: each of said adjusting members is comprised of a set screw threadably secured to its associated clamping member with one end thereof engaging against the associated end of said body member.
13. A saddle according to claim 12 wherein: said slot means comprises a single dovetailed slot having its wider cross-sectional dimension inwardly of the outer surface of said body member.
14. A saddle according to claim 13 wherein: a dovetailed support member is removably disposed within said dovetailed slot.
15. A saddle for mounting a printing plate with bent over opposite ends onto a printing cylinder comprising:
- a. a body member having curved outer and under surfaces adapted to be locked onto the curved supporting surface

- of the printing cylinder and having opposite ends extending across the supporting surface of the cylinder in a direction parallel to the longitudinal axis thereof;
 - b. an adjustable plate clamping member connected to the opposite ends of said body member and extending thereacross, each of said clamping members having exposed outer and under surfaces disposed within the curved boundary formed by lines extending along the outer and under surfaces of said body member and a clamping surface on the side thereof facing away from the associated end of the body member and over which the bent end of the plate is adapted to be received;
 - c. adjustable mounting means extending through each of said plate clamping members and into the associated end of the body member for connecting each of said clamping members onto the associated end of the body member for movement toward and away therefrom from a first position immediately adjacent said end where the plate may be loosely attached to said saddle with its bent over ends received over said clamping surfaces to a second position spaced from the end of said body member to securely lock said plate onto the saddle under tension; said adjustable mounting means including:
 1. a plurality of support pins extending outwardly from each end of said body member and slidably received within cooperating openings in said clamping members with a clearance between each of said pins and the wall surfaces of the cooperating opening; and
 2. a plurality of adjusting members comprising set screws threadably secured to said clamping members independently of each other for selective independent movement toward and away from said opposite ends and engaging against said opposite ends at spaced locations thereacross, each of said clamping members being provided with openings on the side facing away from the associated end of said body member for permitting access to the opposite end of said set screws;
 - d. registration means on the portion of the outer surface of said body member outside the portion covered by said plate adapted to cooperate with registration means on said plate for accurately aligning said plate on said outer surface upon selective independent movement of said adjusting members; and
 - e. locking members connected to said body member and engaging said clamping members for limiting the outward movement thereof along said support pins.
16. A saddle according to claim 15 wherein: said locking members are comprised of screws having enlarged heads slidably received in cooperating openings in said clamping members and threaded into said body member, each of said last mentioned openings having a shoulder facing away from the associated end of said body member for engaging against the head of the cooperating screw to limit the outward movement of said clamping member on said support pins.
17. A saddle according to claim 16 wherein:
- a. the opposite ends of said body member are comprised of separate members fixed thereto along surfaces bevelled inwardly of the outer surface of said body member; and
 - b. the outer and under surfaces of said separate members and said clamping members are disposed within the curved boundary formed by lines extending along the outer and under surfaces of the intermediate portions of said body member.
18. A saddle for mounting a printing plate with bent over opposite ends onto a printing cylinder comprising:
- a. a body member having curved outer and under surfaces adapted to be locked onto the curved supporting surface of the printing cylinder and having opposite ends extending across the supporting surface of the cylinder in a direction parallel to the longitudinal axis thereof, the opposite ends of said body member being comprised of separate members fixed thereto with the outer and under surfaces thereof curved to form extensions of the curved

outer and under surfaces of the intermediate portions of said body member;

- b. an adjustable plate clamping member connected to the opposite ends of said body member and extending thereacross, each of said clamping members having exposed outer and under surfaces disposed within the curved boundary formed by lines extending along the outer and under surfaces of said body member and a clamping surface on the side thereof facing away from the associated end of the body member and over which the bent end of the plate is adapted to be received;
- c. adjustable mounting means extending through each of said plate clamping members and into the associated end of the body member for connecting each of said clamping members onto the associated end of the body member for movement toward and away therefrom from a first position immediately adjacent said end where the plate may be loosely attached to said saddle with its bent over ends received over said clamping surfaces to a second position spaced from the end of said body member to securely lock said plate onto the saddle under tension; said adjustable mounting means including:
 - 1. a plurality of support pins extending outwardly from each end of said body member and slidably received within cooperating openings in said clamping members with a clearance between each of said pins and the wall surfaces of the cooperating opening; and
 - 2. a plurality of adjusting members movably secured to said clamping members independently of each other for selective independent movement toward and away from said opposite ends and engaging against said opposite ends at spaced locations thereacross; and
- d. registration means on the portion of the outer surface of said body member outside the portion covered by said plate adapted to cooperate with registration means on said plate for accurately aligning said plate on said outer surface upon selective independent movement of said adjusting members.

19. A saddle according to claim 18 wherein: the clamping surface of each of said clamping members is bevelled inwardly toward the associated end of the body member at about 45° relative to the upper surface thereof.

20. A saddle according to claim 19 wherein:

- a. the bevelled clamping surface of each of said clamping

members extends to a predetermined point spaced from the undersurface thereof with the remaining portion of the side facing away from the end of said body member being bevelled inwardly at an angle less than 45° and

- b. all of said aforementioned openings in said clamping members are disposed between said predetermined point and the undersurface thereof.

21. A saddle for mounting printing plates with bent over opposite ends onto a printing cylinder comprising:

- a. a body member having curved outer and under surfaces adapted to be locked onto the curved supporting surface of the printing cylinder and having opposite ends extending across the supporting surface of the cylinder in the direction parallel to the longitudinal axis thereof;
- b. adjustable plate clamping members connected to the opposite ends of said body member and extending thereacross, said clamping members each having exposed outer and under surfaces disposed within the curved boundary formed by lines extending along the outer and under surfaces of said body member and a clamping surface on the side thereof facing away from the end of the body member to which it is connected and over which the bent end of a plate is adapted to be received;
- c. adjustable mounting means extending through said plate clamping members and into the associated end of the body member for connecting said clamping members onto the opposite ends of the body member for movement toward and away therefrom from a first position immediately adjacent said ends where the plate may be loosely attached to said saddle with its bent over ends received over said clamping surfaces to a second position spaced from the ends of said body member to securely lock a plate onto the saddle under tension; and
- d. slot means in the curved outer surface of said body member, said slot means comprising two separate slots having their outer ends spaced from each other by a distance less than the spacing between their inner ends and being disposed centrally of the opposite ends thereof and extending across said body member in a direction parallel to the opposite ends thereof and with the sides of said slot means defining two clamping surfaces facing away from the clamping surfaces of the opposite plate clamping means.