June 18, 1935. G. M. JAFFIN ET AL 2,005,340

SEAL

Filed June 17, 1933 2 Sheets-Sheet 1

Fig. 1.

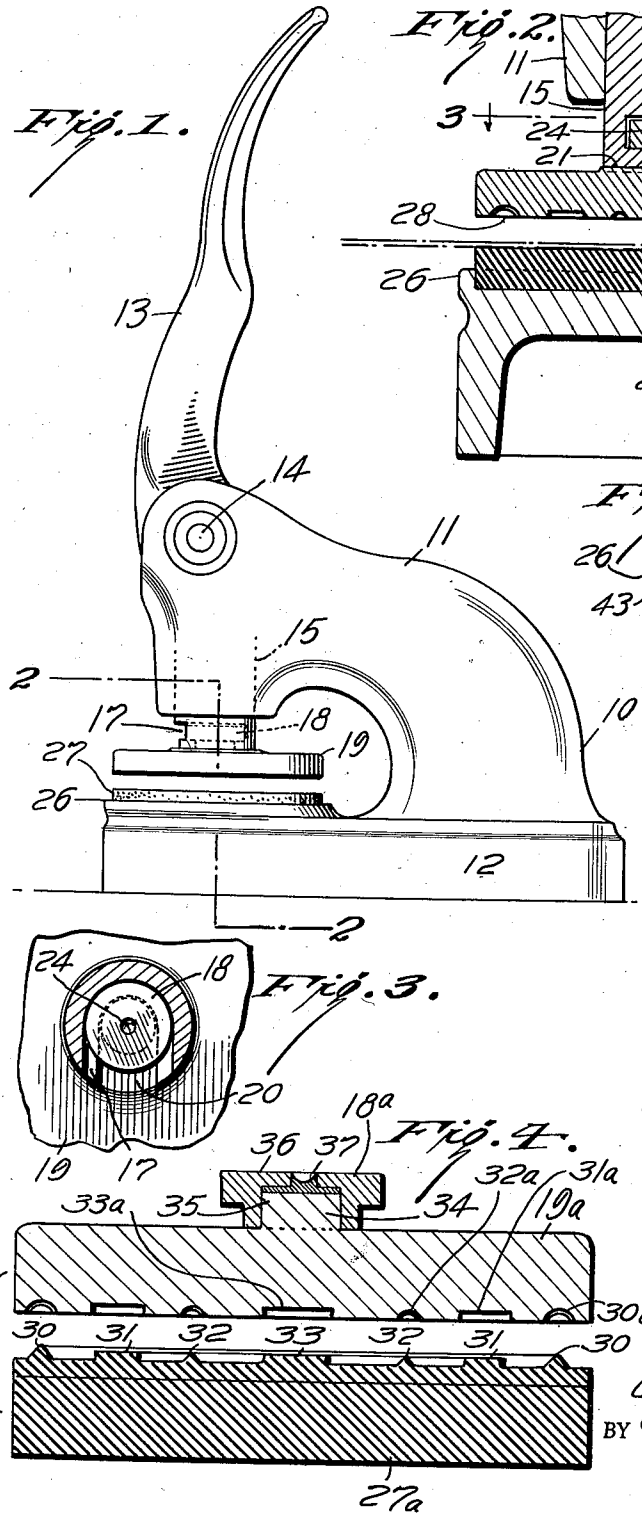


Fig. 2.

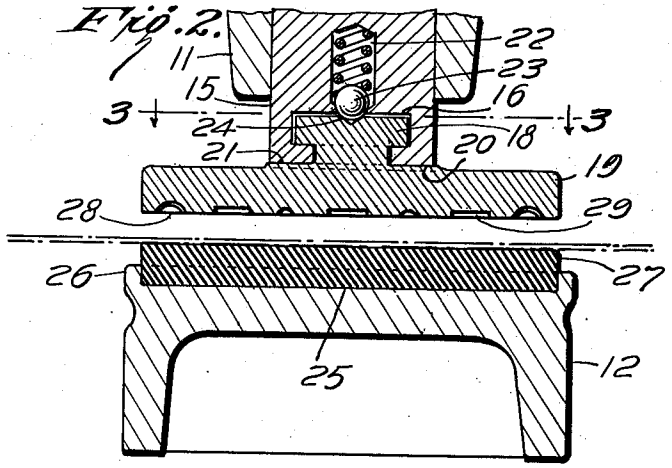


Fig. 2a.

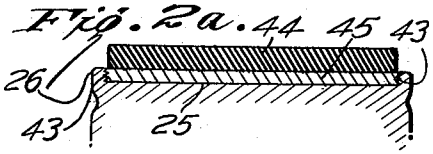


Fig. 6.

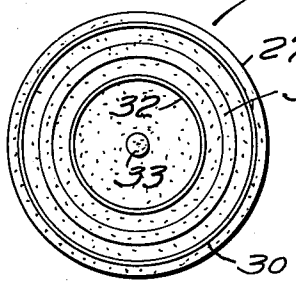
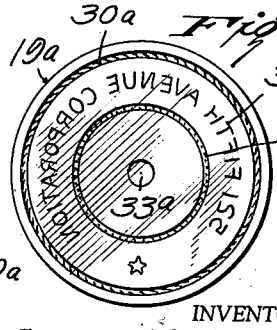


Fig. 3.

Fig. 4.

Fig. 5.



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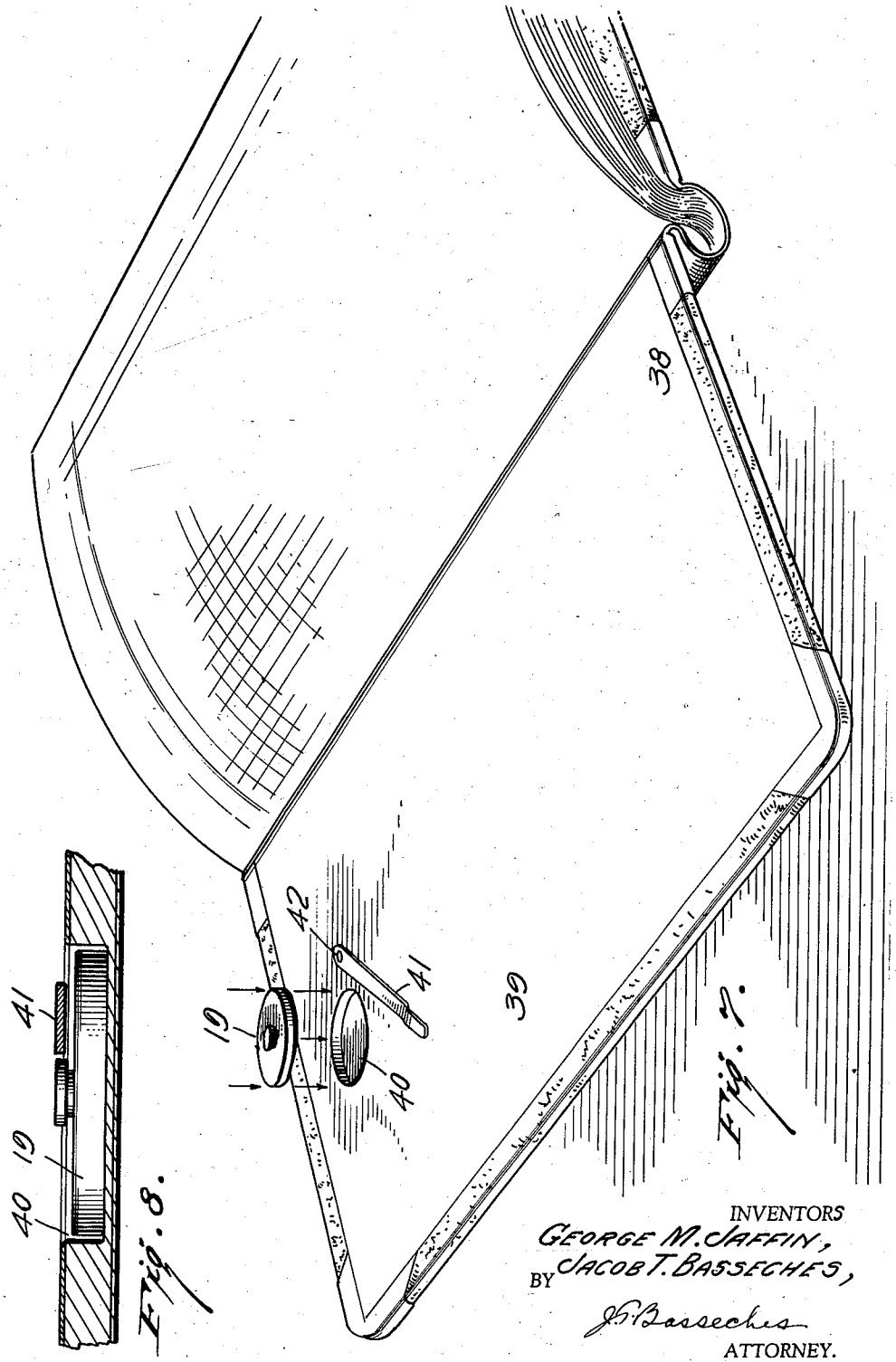


Fig. 7.

Fig. 8.

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SEAL

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Application June 17, 1933, Serial No. 676,286

12 Claims. (Cl. 101—28)

This invention relates to seal presses; more particularly, to embossing means for impressing legal documents and to paraphernalia therefor.

Impression seals now universally used in connection with the legalization of documents of corporations comprise complemental sections including a male and a female die, which are operated in connection with presses, to authenticate corporate acts, in accordance with legal requirements. It has been found necessary to associate these impression members or dies with the press for operating the same, as a unitary assembly. It has also become the practice of corporations utilizing such seals, to leave these seal presses in the possession of their attorneys, so as to be convenient in connection with any official action that may be taken at the attorney's office, which may require affixation of the seal. The bulkiness of such presses has been a source of inconvenience in a busy lawyer's office, and a large accumulation of these presses is difficult to store and to reach conveniently and quickly, when the occasion demands their use. Due to the bulk and nature of the seal presses, they have been stored separately from the documents and books of the corporation with which they are to be used, resulting in the inconvenience above referred to.

Additionally, there is a great deal of unnecessary expense in the duplication of parts, such as the presses, in addition to the expense involved in accurately aligning the impression members or dies, so that the male and female elements are in accurate alignment in the seal press.

We have found that the burden and inconvenience resulting from the large accumulation of seal presses, and the expense involved in the manufacture and assembly of seal presses, may be very substantially reduced.

It is therefore an object of our invention to provide corporate paraphernalia, such as seal presses, in which the impression members or dies, as now used, are eliminated as an associated part of the seal press, and the same conveniently formed and assembled as part of documents and books of the corporation, whereby great facility is experienced in storage of these parts. It is contemplated by our invention to segregate from the seal press, the impression members or dies and to avoid the necessity for aligning such parts, as the male and female impressing dies.

It is therefore further contemplated by our invention to provide impressing means for papers used in connection with legal documents, particularly of corporations, in which a single press may be used interchangeably with the impression member for embossing or sealing the paper, and to so construct the dies or impression members in relation to the seal press as to permit ready interchange thereof with great facility and ease, and without the necessity for alignment of complemental male and female embossing dies, as is experienced with present day seal presses.

It is a further object of our invention to provide impressing means for use in connection with legal documents, which avoids the necessity for using complemental male and female dies and which permits the use of a common press, so that any number of seals may be used in connection with one press by replacement of the male portion of the die, which is to cooperate with the female or embossing element, constituting an impressionable and deformable resilient base, against which the complemental, pre-formed impression member may act, when under pressure by the press, thereby serving to emboss or form the seal upon a document formed of paper or similar material. It is thus contemplated by our invention to form an impression upon paper or a similar sheet by disposing the impression die upon paper against the resilient support, which yields under high pressure, to deform or emboss the paper and thereby obtain the seal impression with the requisite definition, thus eliminating the necessity of pre-forming the complemental section of the impression members or dies.

It is contemplated by our invention to utilize a single metal engraved or otherwise formed die and associate with the same, a yieldable and resilient support of normally continuous contour which, however, under the tremendous pressures exerted by seal presses, will deform itself to the contour of the complemental die, such as a female member and mould or emboss an interposed sheet with the requisite definition and clarity of outline.

It is a further object of our invention to provide a seal press capable of interchangeably holding impression members by providing the press bed with a continuous and resilient, readily deformable sheathing and the press head with a chuck or similar joint, whereby an impression die may be interchangeably connected therewith and any number of impression dies substituted in said chuck or joint, thereby permitting a single press to be used with any number of dies for impressing or embossing paper or similar sheeting.

It is further contemplated as an object of our invention to provide an association of seal press and seal permitting ready interchange of the seal from the seal press, and novel constructional features whereby such interchange may be quickly and facilely effected, thus enabling the convenient transportation of any number of impressing members, such as corporation seals,

and only a single press, on those occasions where a single transaction occurring outside of the attorney's office may involve a large number of corporations or impression members.

It is further contemplated by our invention to provide a seal press in which a movable jaw includes a chuck or joint for holding an impression die, serving to operate against the complemental jaw or bed, and emboss or press sheeted material, such as paper, without the necessity of using a complemental, accurately located metal die.

Still further objects of our invention reside in the provision of corporate paraphernalia, such as impression seals, and the record books of corporations, whereby the two may be conveniently and facilely stored and occupy the minimum space for filing purposes, including mounting means forming part of the corporate records or books thereof, for holding the impression seal separate and apart from the seal press therefor.

To attain these objects and such further objects as may appear herein or be hereinafter pointed out, we make reference to the accompanying drawings, forming a part hereof, in which—

Figure 1 is a side elevation of an impression seal made in accordance with our invention;

Figure 2 is a fragmentary section taken on the line 2—2 of Figure 1;

Figure 2*a* is a fragmentary sectional view of another embodiment of our invention for mounting the resilient disk;

Figure 3 is a fragmentary section taken on the line 3—3 of Figure 2;

Figure 4 is a sectional view of the female and male sections of an impression seal forming another embodiment of our invention;

Figures 5 and 6, respectively are face views thereof;

Figure 7 is a perspective view of the interior of the cover of a corporate record book, and mounting means for the impression seal;

Figure 8 is a fragmentary sectional view through the mounting means for the seal referred to in Figure 7.

Making reference to the drawings, our invention may be utilized in connection with a conventional form of seal press 10, which includes a yoke 11, supported from a pedestal or base 12. The yoke 11 carries the operating lever 13, pivoted upon the shaft 14 to operate, by a cam (not shown) a plunger 15. It is preferred that the plunger 15 be fitted with a T-shaped slot 16, having a lateral opening 17 towards the front of the plunger. The T-shaped slot 16 of the plunger 15 is arranged to hold a cooperating T-shaped head 18, of one section of a die 19. This die is preferably formed with a central boss 20, cooperating with the end 21 of the plunger to obtain uniform distribution of pressure thereon, in a manner hereinafter to be described.

As will be readily understood, the T-shaped slot 16 is arranged to slidably receive the T-shaped head 18 of a die, through the opening 17. Approximate location is obtained by providing the plunger, at its central boring 22, with a spring pressed ball latch 23, cooperating with a depressed slot 24 in the head 16. Thus, the die 19 may be readily located to the approximate axial position of the plunger 15. The die, in its connection with the plunger, is such as to require no particular attention in its location for reasons which will become apparent as this description proceeds. Oppositely disposed to the plunger and immediately therebeneath, forming part of the base 12, there is provided a bed or table 25, having upstanding ridges 26, arranged to hold a disk 27, of highly resilient and deformable material, such as live, vulcanized rubber.

The general characteristics of the rubber from which the disk is made are such as to be sufficiently rigid under the pressure of the press that displacement will not occur at pressures sufficient to emboss a wide range of weights of paper which may be used in connection with legal documents for which the device contemplated by the present invention is to be used.

It will further be observed that the rubber from which the disk is to be made has sufficient resiliency to be deformable to the intricate outlines of the die under the pressures necessary for embossing or impressing paper, as hereinbefore mentioned. A highly live, vulcanized rubber, such as that which is used in the best grade inner tubes, and which may be characterized as high grade inner tube stock, will be sufficient for embossing and impressing a good grade, twenty pound stock, such as known on the market as Coupon Bond. For heavier grades, provision may be made to increase the resiliency of the disk or to increase the ridges 26, to avoid spreading of the disk under the pressures to be applied.

By the construction provided, the impressing die 19 may be made in the usual manner for cutting or engraving the female portion of a die used in connection with seals for impressing corporate documents, the indentations 28 and 29 representing the milling and engraving in the female die 19. It will be understood, in view of the tremendous pressures which may be applied, that the female portion should be made of a high grade bell bronze, of sufficient thickness so that pressures may be applied and the same uniformly distributed without deforming the die 19.

It will be understood, from the construction described, that any number of the female dies may be interchanged and associated with the press. It will be further understood that no particular care need be exercised in inserting the female die within the slotted holder therefor as no complemental or male die is associated therewith.

In Figures 4, 5 and 6, we have illustrated a still further embodiment of our invention, especially as to the cooperating impressing members heretofore described. In this embodiment, a resilient disk 27*a* has general dimensions to be readily received by the press hereinbefore described so that it may be readily mounted upon the table 25 and upon the encircling ridge 26 thereof. In this embodiment, we prefer to make the major portion of the body of the disk of live, resilient vulcanized rubber, as described in connection with the embodiment particularly illustrated in Figures 1 and 2 at 27. However, at the upper face there are formed a plurality of ridges 30, 31, 32 and 33. These ridges may be formed by a molding operation at the time that the rubber is cured. It is preferred to make these ridges of greater resiliency than the body of the disk 27*a*. This resilient disk, as thus described, forms the male die with any number of female dies of metallic character, as hereinbefore described. Preferably, one as illustrated in Figures 4 and 5 is used, in which 19*a* is a metallic female die, the impressing face thereof being engraved with

impressing outlines of the character usually used on such seals. In this construction, these outlines are arranged concentrically and the milling 30*a*, lettering 31*a*, scroll work 32*a* and insignia 33*a*, are arranged to correspond to the radial location of the ridges 30, 31, 32 and 33, formed in the resilient male disk 27*a*, previously described.

In use, the female die 19*a* may be provided with a T-shaped head 18*a*. Where it is desired to change existing dies to fit the sealing press hereinbefore described, the T-shaped head 18*a* may be fitted over the conventional lug 34, usually found on the present day impression members of seal presses and for this purpose, the head 18*a* is formed with an enlarged orifice 35 at the bottom portion terminating into a smaller orifice 36. To position this head to the conventional lug 34, the head 18*a* is attached by a driving fit, anchorage being effected by pouring molten metal 37 through the orifice 36 and over the clearance remaining over the lug 34, thus securely attaching the head 18*a* to the impression member 19*a*.

In Figure 2*a* we have shown another embodiment of our invention for mounting the resilient disk 27 or 27*a*. In this construction, extending to the edges of the bed or table in the walls of the ridges 26, we provide screw threading 43. A resilient disk 44 of the character shown in Figures 2 and 4 is cemented to a disk 45. This has its peripheral edge screw threaded to engage the threads 43, previously described. By this construction, should it be found desirable to replace the resilient disk, this may be conveniently done so that if there is any tendency for the resilient member to age and change in characteristics, or should it be desirable to change the disk for one of different resiliency or hardness, this may be quickly and conveniently accomplished.

It will be observed from the construction described, that a single seal press, carrying the resilient base 27 or 27*a*, can be used with any number of impression seals. When ready for use, the single female impressing die is inserted through the opening 17, to engage the plunger 15 and the press is ready to emboss and form the impression of the seal upon any document. After so accomplishing this operation, upon relieving the pressure and moving the plunger to the normal position, the seal may be readily removed by sliding the same outwardly through the slot laterally.

Though we have specified that live, vulcanized rubber may be used for forming the member 27 or 27*a*, as herein described, rubber which has a hardness within the range of 30 to 60 kilograms per square centimeter, as obtained by a Shaw durometer, Type A, will give exceedingly desirable results. A durometer number of 40 to 55 is preferred by us.

Where a resilient disk of the character shown and described in Figures 4, 5 and 6 is used, the base may have the resiliency described in its entirety, or the ridges 30 to 33 may be formed of rubber having a hardness indexed by the Shaw durometer of 20 to 30 and the remainder of the disk may have a durometer reading of 40 to 55.

It will be understood, however, that variation in depth of the identations 28 and 29 in the female dies 19 and 19*a* may permit a variation in the resilient character of the material used in the disk and though we have described a durometer reading of 40 to 55 as the preferred resiliency or hardness with a female die engraved or cut in accordance with present practice, with dies of different depth, alteration may be found desirable in the resilient characteristics or hardness of the disks 27 and 27*a*.

In accordance with our invention, the pressure utilized is less than that which will permanently deform the resilient base and the resiliency or hardness of the base is greater than the bursting strength of the paper usually used in legal documents of the character to be used with the apparatus contemplated by this invention.

It will thus be noted that the essential portion of the seal, in the form of the impression die 19, occupies comparatively little space, and can be readily filed away with the remainder of the documents of that particular corporation.

In order to more compactly store this independent impression die, we have illustrated in Figure 7 one method of conveniently accomplishing this purpose. In this embodiment of our invention we have illustrated an impression die to accompany a part of the corporate paraphernalia, such as the minute book 38, which, in one of the covers 39, has formed an orifice 40, adapted to receive the impression die 19. A latch 41, pivoted at 42, is arranged to form a closure for the orifice 40, so that upon inserting the impression die 19 within the orifice 40, the latch 41 may be pivoted over the orifice and thereby hold the seal within the orifice against displacement. In this manner, such corporate paraphernalia as the minute book and seal may be conveniently filed together, occupying no more space than the volume itself. Thus, the impression die may be conveniently assembled with portions of the paraphernalia and may be quickly found when needed, avoiding the necessity for searching through a large accumulation of presses when some particular seal is required, and also affording privacy in that the seal may be safely filed away in the filing cabinets.

It will be understood that while in our preferred form of the invention it is proposed to make the female portion of the die of metal and the cooperating portion of resilient material, such as live vulcanized rubber, a contrary arrangement may be possible, in which event the replaceable metallic member is formed with raised markings defining the milling, knurling and outlining characters, and in all other respects the parts may, to a certain degree, be reversed.

It will further be understood that while the dies 19 and 19*a* may be engraved with outlines or characters to the usual depth, a greater definition may be obtained by a deeper cutting of the characters, and where the cutting is intensified, this will permit a greater range of the character of resilient material which may be used for forming the base or disk 27 or 27*a* as described.

In general, it will be observed that though the device described, in its preferred form, has utility in connection with corporate seals and other corporate paraphernalia, a wider application may be made where impressioning devices are used, as will suggest themselves to those skilled in the art. However, such additional applications are contemplated by us as come within the scope of the appended claims.

Having thus described our invention and illustrated its use, what we claim as new and desire to secure by Letters Patent, is—

1. An impression seal of the character described including a bed having a resilient impressionable unengraved surface, a supporting standard disposed from said base mounting a pressure applying assembly, comprising a reciprocal plunger, over said resilient base, an impression die for said plunger and means for connecting said die to said plunger independently of the outline of the base comprising readily disengageable connecting means, the resilient base serving as the mate for the impression die.

2. An impression seal of the character described including a bed having a resilient impressionable unengraved surface, a supporting standard disposed from said base mounting a pressure applying assembly, comprising a reciprocal plunger, over said resilient base, an impression die for said plunger and means for connecting said die to said plunger independently of the outline of the base comprising readily disengageable connecting means, said connecting means comprising a laterally disposed slot on said plunger and a complemental headed member on said impression die, the resilient base serving as the mate for the impression die in all connected positions of the impressed die.

3. An impression seal of the character described comprising a pressure applying assembly including a reciprocal plunger, said plunger including means to removably support an impression die, said means comprising interconnecting parts on said plunger and die interfitting in any position, a resilient base adapted to receive said die to emboss an impression upon paper therebetween, said resilient base having a hardness durometer number between 30 to 60 and serving as the mate for the impression die.

4. An impression seal comprising a pressure applying assembly including a reciprocal plunger, said plunger including means to removably support an impression die, said means comprising interconnecting parts on said plunger and die, interfitting in any position, a resilient base adapted to receive said die to emboss an impression upon paper therebetween, said resilient base having a hardness durometer number between 40 to 45 and serving as the mate for the impression die.

5. An impression seal comprising a pressure applying assembly including a reciprocal plunger, said plunger including means to removably support an impression die, said means comprising interconnecting parts on said plunger and die, interfitting in any position, a resilient base adapted to receive said die to emboss an impression upon paper therebetween, said resilient base having a hardness which is greater than the bursting strength of paper of less than forty pounds per ream yet sufficiently resilient to conform to the details of the impression die under a pressure substantially normally used in impressing paper by seals, the resilient base serving as the mate for the impression die.

6. An impression seal of the character described comprising a pressure table or base including a resilient layer, a pressure assembly disposed thereover including a reciprocal plunger, means for connecting an impression die to said plunger in axially rotatable relationship comprising laterally slidable connecting means and latching means between said plunger and die, said means interfitting in any axial position of said die to locate said impression member in the axial position of said plunger, the resilient layer serving as the mate for the impression die.

7. In an impression seal of the character described, a pressure applying assembly comprising a reciprocal plunger, means for interchangeably and revolubly connecting an impression die with said plunger interfitting in all axial positions of said die, depressed impression markings on said die, all of which markings are arranged concentrically, and a resilient base for said die, said resilient base including concentrically disposed raised ridges corresponding in location to the markings on said impression die, the resilient base serving as the mate for the impression die.

8. In an impression seal of the character described, a pressure applying assembly comprising a reciprocal plunger, means for interchangeably and revolubly connecting an impression die with said plunger interfitting in all axial positions of said die, depressed impression markings on said die, all of which markings are arranged concentrically, and a resilient base for said die, said resilient base including concentrically disposed raised ridges corresponding in location to the markings on said impression die, said ridges being of a different resiliency than the supporting body therefor, the resilient base serving as the mate for the impression die.

9. For use with an impression seal of the character described including a resilient base, an impression die therefor consisting solely of concentrically disposed cut impression markings whereby the seal may be axially positioned independently of the base and mate therewith in all axial positions of said die.

10. For use with an impression seal of the character described including an impression assembly comprising a reciprocal plunger, an impression die including a plunger connecting portion arranged to freely, revolubly engage complemental engaging portions on the aforementioned plunger and including a boss forming a pressure area for said plunger.

11. For use with an impression seal including an impression assembly comprising a reciprocal plunger, an impression die including a plunger connecting portion arranged to revolubly engage complemental engaging portions on the aforementioned plunger and including a boss forming a pressure area for said plunger, said connecting portion comprising laterally slidable, complementally arranged head and slot on said die and plunger, respectively.

12. For use with an impression seal including an impression assembly comprising a reciprocal plunger, an impression die including a plunger connecting portion arranged to revolubly engage complemental engaging portions on the aforementioned plunger and including a boss forming a pressure area for said plunger, said connecting portion comprising laterally slidable, complementally arranged head and slot, on said die and plunger, respectively, and latching means to locate said die in the axial position of said plunger.

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