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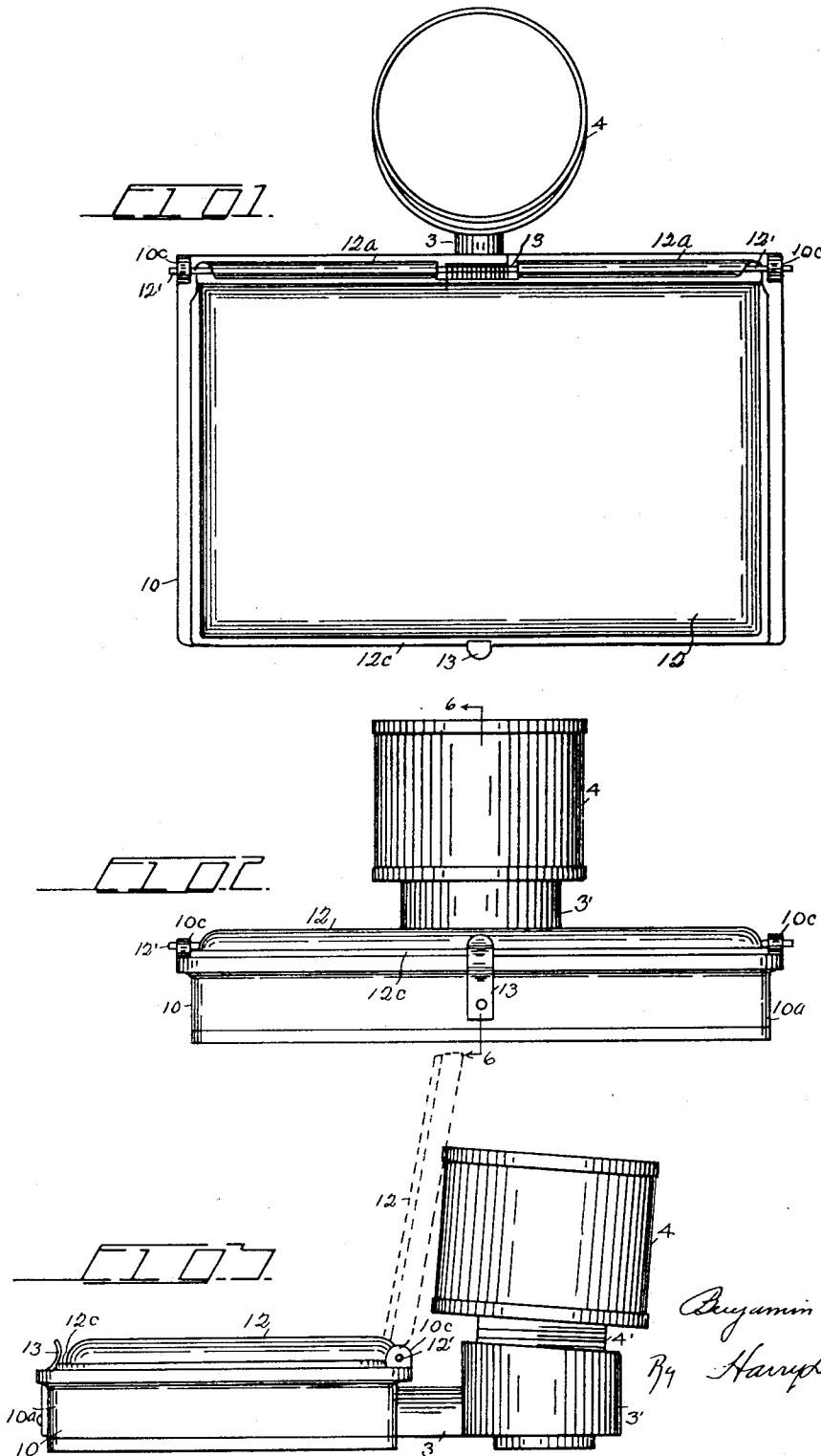
B. E. HORTON

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FOUNTAIN INKING PAD

Filed Sept. 10, 1931

2 Sheets-Sheet 1



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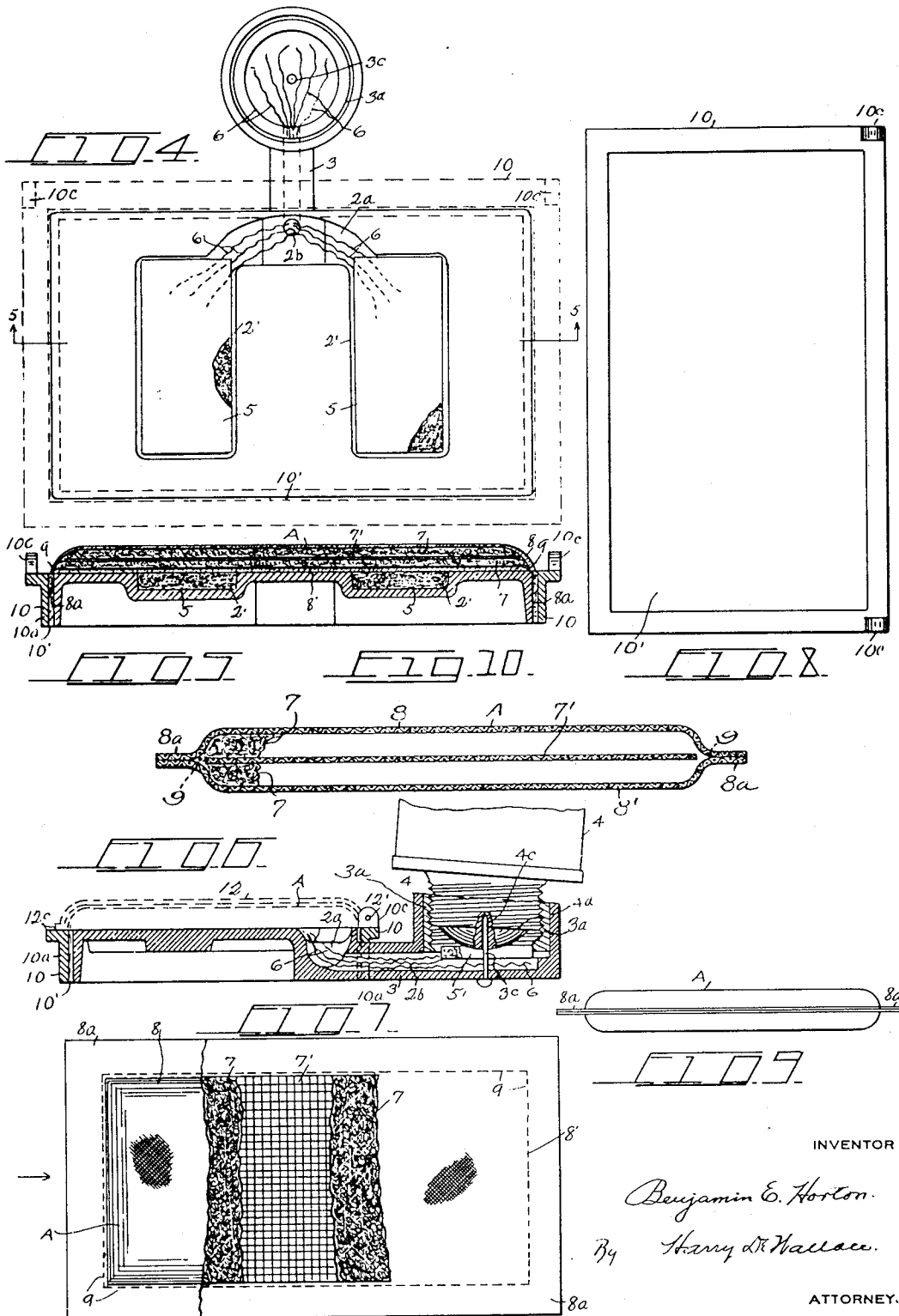
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2 Sheets-Sheet 2



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FOUNTAIN INKING PAD

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9 Claims. (Cl. 91—54.5)

This invention relates to a fountain pad, designed for inking rubber and other stamps, and has for its object to provide a perpetually damp pad that is supplied with ink continuously by a reservoir which is equipped with novel gravity ink-feeding means. A further object is to provide a series of capillary feeding elements that carry the ink from the reservoir to the pad, said feeders comprising wicks and other absorbent materials that are confined in a series of cavities from which air and light are excluded. A further object is to provide a reversible pad of novel construction comprising a laminated arrangement of absorbent material, like felt, and a layer of metal gauze which tends to stiffen and maintain the pad in plane condition, and yet facilitates the proper feeding of the ink from one layer of felt to the other for maintaining consistent moisture throughout the pad. And a further object is to provide novel means for detachably clamping and holding the pad in intimate engagement with the capillary feeding elements.

I attain these objects by the means set forth in the detailed description which follows, and as illustrated by the accompanying drawings, in which—

Figure 1 is a top plan view of the complete device. Fig. 2 is a front side elevation, and Fig. 3 is an end elevation of the same. Fig. 4 is a top plan view of the base, showing the recesses that receive certain of the capillary feeding parts, also showing the wicks that carry the ink from the reservoir towards said parts. Fig. 5 is a vertical longitudinal section, taken on line 5—5 of Fig. 4, showing the base that supports the inking pad, also showing the frame that clamps and holds the pad in place. Fig. 6 is a transverse vertical section, taken on line 6—6 of Fig. 2, showing the gravity and capillary feeding members, by which the main pad is automatically supplied with ink. Fig. 7 is a broken plan view of the main inking pad, showing the laminated construction of the same. Fig. 8 is a plan view of the clamping frame. And Fig. 9 is an end elevation of the ink pad detached from the holder. Fig. 10 is a central longitudinal section of the inking pad shown in Fig. 9 with the felt 7 partly broken away.

In the drawings, 2 represents the base that supports the entire pad structure, the base preferably being rectangular in form and having at its rear side an integral arm 3, whose free end is formed with a cylindrical cup or socket 3', which is preferably interiorly threaded, as at 3a, to detachably receive the threaded neck 4' of a reservoir or tank 4, that contains a supply of ink, the said neck being closed by a hard rubber or other plug 4a. The cup 3' is preferably fitted with a sharp upstanding pin 3c, that is loosely received in an axial opening 4c of the plug 4a, the said

pin acting as a valve or gauge to control the gravity flow of the ink from the reservoir into the bottom of the cup 3'. The top of the base 2 is substantially plane and is preferably formed with similar shallow parallel cavities 2', in which are disposed sheet-felt or other absorbent material, as 5, that substantially fill the cavities, the said cavities connecting near the rear side of the base with a common longitudinal recess or groove 2a, and said groove also communicating with an opening 2b that extends through the arm 3 and connects with the socket 3'. 6 represents a number of strands of candle-wicking, or like capillary feeders, that conduct the ink discharged by gravity from the reservoir through the opening 2b towards the felts 5. The ends of the wicks 6 are respectively disposed beneath the felts 5, and a felt disc 5' that is disposed in the bottom of the cup 3' concentric to the pin 3c, which pierces said disc. When the neck 4' is screwed into socket 3' to the proper extent, the plug 4a preferably nests in the compressible disc 5', as shown in Fig. 6. The opening 4c of the plug 4a is preferably but one or two thousandths of an inch larger than the pin 3c, so that the feed of the ink is barely sufficient to keep the inking pad, as A, at the right moisture as long as any ink remains in the reservoir 4. The feed of the ink is furthermore held steady at the desired volume by the creation of a partial vacuum within the container 4, due to the extremely small area of the outlet 4c and the lack of suitable means for air to freely enter the tank and accelerate the outflow of the ink. The ink, as it streams down the pin 3c, is absorbed by the felt 5', from which it gravitates towards the bottom of cup 3', where the ink is absorbed in turn by the wicks 6, which carry it by capillary attraction towards the felts 5, as explained.

The inking pad A, which absorbs the ink from the felts 5, is preferably composed of several layers or laminas including similar sheets, as 7, of felt or other absorbent material between which is disposed a sheet or layer of wire gauze, as 7', the latter tending to stiffen and maintain the plane condition of the pad when subjected to pressure by the inking of the stamps, and at the same time enables the ink to freely flow from one sheet of felt to the other. The layers 7—7' are preferably of the same size, and these are disposed between similar but larger sheets of poplin or other durable and relatively fine grain fabric, as 8—8'. After the fabric covers are suitably positioned, the latter are sewed, as indicated by the stitching 9, in Fig. 7, to permanently confine the absorbent parts of the pad. This provides a continuous border or margin, as 8a, composed solely of the poplin which is naturally flexible, and when the pad A is applied to the base 2, a frame 10, having an opening 10' slightly larger than the base and a

continuous depending flange 10a, is next placed upon and in registry with the pad and sufficient pressure exerted by the operator's hands to force the border 8a downwardly between the flange 10a and the four edges of the base, as shown in Fig. 5. This latter operation results in rigidly clamping and holding the pad A in the proper position with its bottom facing of fabric 8', held in intimate engagement with the top face of the base as well as the top surfaces of the felts 5, as best seen in Fig. 5. When one facing of fabric (8) wears out, the pad A may be removed, inverted and re-applied to the base, thereby extending the life of the pad for another period of the same length.

The pad A, when not in use, is preferably enclosed by a cover 12, which is molded to conform to the shape of the pad, as best shown in Fig. 6. The cover is preferably hinged by a pintle 12' that passes through loops 12a of the cover and also through perforated lugs 10c of the frame 10. The cover 12 is preferably raised, as shown in Fig. 3, by a spring 13 (see Fig. 1), to expose the pad for inking purposes. The cover may be held in the closed position by a spring clip, as 13, which is mounted upon the front wall of the frame and engages a lip 12c of the cover. In practice, the reservoirs 4 are fitted with the perforated plugs 4a and filled with ink at the factory, and the necks are also fitted with screw caps (not shown), which may be removed and discarded when the reservoirs are applied to the socket 3' of the inking device.

Having thus described my invention, what I claim, is—

1. An inking device for rubber and other stamps comprising a base fitted with absorbent areas, a reservoir to contain a supply of ink supported by said base, means to control the gravitation of the ink from said reservoir, ink conducting wicks connecting the reservoir and absorbent areas, a laminated pad overlying said base and said absorbent areas and in intimate contact with said areas, whereby said pad becomes moistened with the ink, and means to clamp the pad to the base to prevent separation of said parts.

2. In an inking device for stamps, a base having cavities containing absorbent sheets and having an arm formed with a socket, a reservoir to contain a supply of ink, having a perforated neck that telescopes said socket, said socket having a pin that plays loosely in said perforation, wicks to absorb the ink that gravitates from the reservoir, said wicks adapted to carry the ink to said absorbent sheets, a reversible inking pad overlying said base and said sheets, and means to clamp the pad tightly against absorbent sheets to cause said pad to be moistened by ink carried by said sheets.

3. An inking device for rubber stamps, and the like, comprising a base formed with recesses, sheets of felt disposed in said recesses, an arm projecting from one edge of said base, the free end of said arm being formed with a threaded socket, said socket being connected with said recesses by an opening in said arm, a reservoir containing ink having a threaded neck to engage the threads of said socket, said neck having a perforation for the discharge of the ink, a pin disposed axially in said socket and loosely engaging said perforation to restrict the outflow of the ink, candle-wicking extending from the sheets of felt through said arm and overlying the bottom of said socket,

adapted to absorb the ink as it gravitates from the reservoir and to carry the ink by capillary attraction to moisten the sheets of felt, a reversible inking pad overlying said base and said felt sheets and absorbing the ink from said sheets, and a frame to clamp and hold said inking pad in intimate engagement with the top of the base and said felt sheets.

4. In an inking device for rubber stamps, the combination with a base for supporting an ink containing reservoir, and a frame that telescopes said base, of a reversible inking pad comprising a sheet of wire gauze, a layer of felt disposed upon each face of said gauze, a fabric covering for each of said layers of felt having a marginal portion extending beyond the marginal edges of the gauze and layers of felt, said marginal portions of the coverings being alined and secured together to form a casing for the gauze and felts, and to provide a border engageable by the frame for reversibly clamping said pad to the base.

5. In an inking device for rubber stamps, the combination with a base for supporting an ink containing reservoir, and a frame that telescopes said base, of a reversible inking pad comprising a central foraminous supporting member, a layer of absorbent material disposed upon each face of the supporting member, a fabric covering for each of said layers of absorbent material having a marginal portion extending beyond the marginal edges of the supporting member and absorbent material, said marginal portions of the coverings being alined and secured together to form a casing and to provide a border engageable by the frame for reversibly clamping said pad to the base.

6. In an inking device for stamps, a base having cavities containing absorbent sheets and having a tubular arm formed with a socket, a reservoir to contain a supply of ink having a perforated neck telescoping said socket, a perforated disk seated within said neck, a pin mounted within said socket and extending loosely through said disk and into said neck, wicks connecting the disk and absorbent sheets, an inking pad overlying said sheets and means for clamping said pad into engagement with said sheets.

7. In an inking device for stamps, a base having a tubular arm formed with a socket, a reservoir having an outlet disposed within said socket, a perforated absorbent disk disposed over said outlet, a pin mounted within said socket and extending loosely through the perforation in said disk, an inking pad carried by said base, and wick members connecting said disk and pad.

8. In an inking device for stamps, a base having an inking pad, a socketed member having a conduit communicating with the base and its pad, a liquid containing reservoir having an outlet received in the socketed member, means to regulate the flow of the liquid from the reservoir, and a capillary member within said conduit connected to said regulating means whereby to restrict the flow of liquid from the regulating means to the pad.

9. In an inking device for stamps, a pad carrying member, a liquid containing reservoir having constant communication with the member and its pad, means to regulate the flow of liquid from the reservoir, and a capillary member permanently connecting the reservoir and pad to restrict the flow of liquid from the regulating means to the pad.

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