

Aug. 18, 1931.

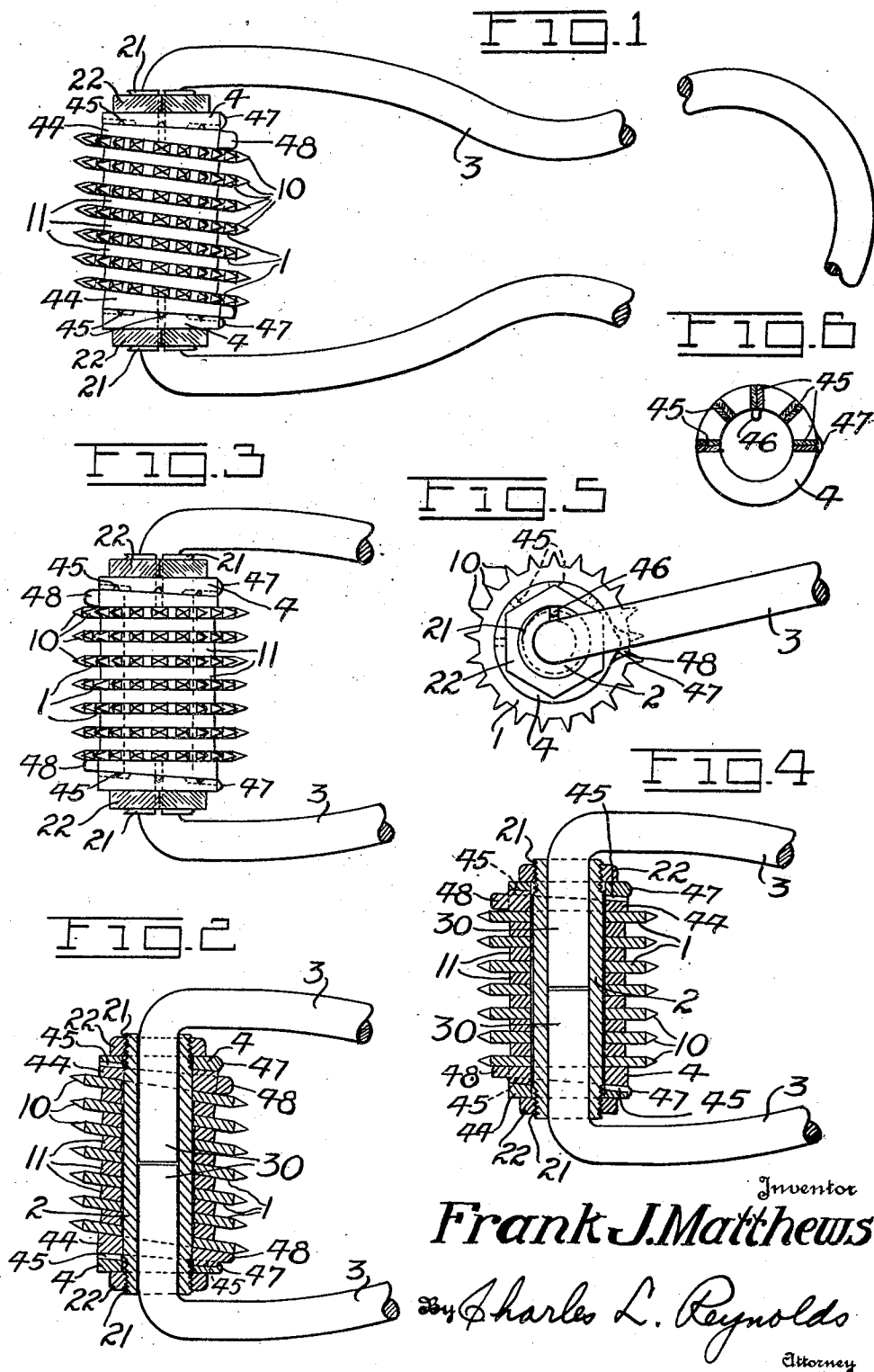
F. J. MATTHEWS

1,819,375

CHECK PROTECTOR

Filed Jan. 15, 1930.

3 Sheets-Sheet 1



Aug. 18, 1931.

F. J. MATTHEWS

1,819,375

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FIG. 7

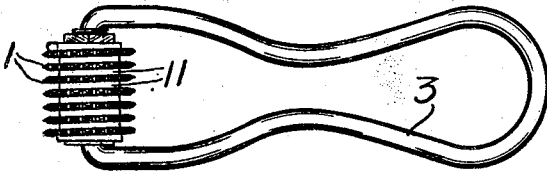


FIG. 9

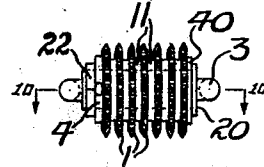


FIG. 8



FIG. 10

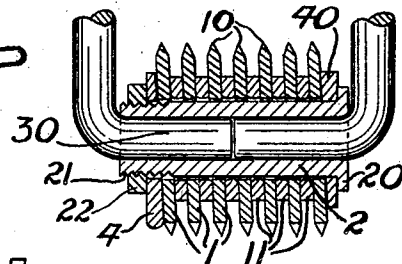


FIG. 12

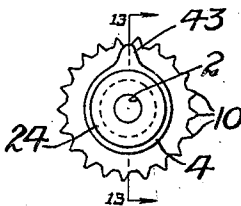


FIG. 13

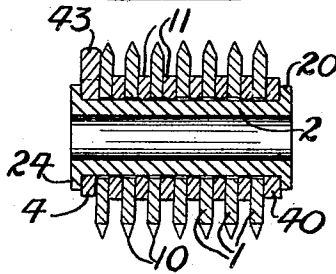


FIG. 11

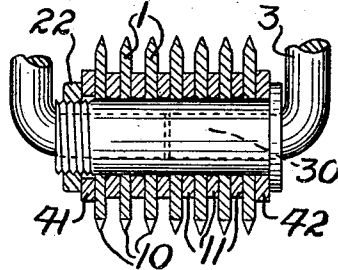


FIG. 14

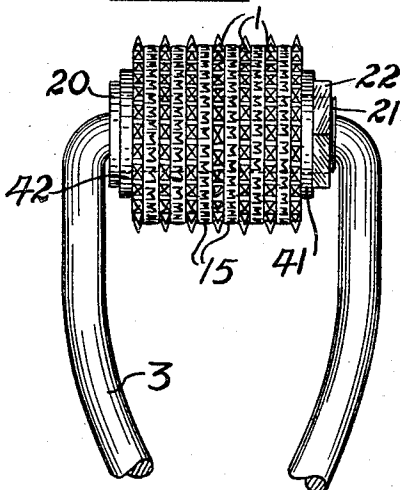


FIG. 15

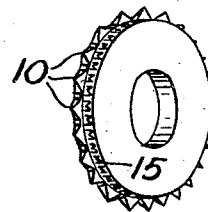
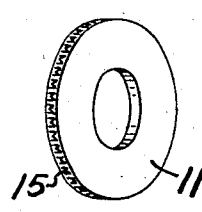


FIG. 16



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Fig. 17

Samuel Mercer

19

Fig. 18

Samuel Mercer

Fig. 19

Samuel Mercer

18

Fig. 20

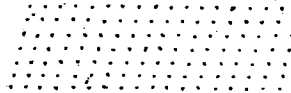


Fig. 21

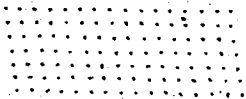


Fig. 22



Fig. 23



Fig. 24

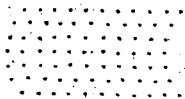


Fig. 25

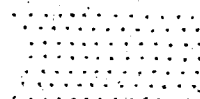


Fig. 26

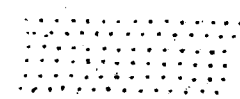


Fig. 27

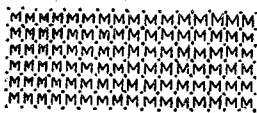


Fig. 28



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UNITED STATES PATENT OFFICE

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CHECK PROTECTOR

Application filed January 15, 1930. Serial No. 420,933.

My invention relates to devices intended to make difficult, if not impossible, the alteration of written documents, especially such documents as checks and like negotiable instruments.

It is an object of my invention to provide a device for this purpose, of simple and inexpensive construction, to be operated by rolling over the surface of the paper a series of marking devices by hand.

It is an object of my invention to provide a device of this general character, wherein the marking devices may be altered in position at will, relative to one another, to provide thereby various patterns.

It is another object to provide a device of this character, by means of which there is automatically produced a wavy line, or a series of wavy lines.

In general, it is my object to provide a check protector made up of a number of independent marking elements, which may be left to have independent motion, or which may be secured together to operate as a unit in various combinations.

My invention comprises the novel parts, and the novel combination thereof, as shown in the accompanying drawings, described in the specification, and as will be more particularly defined by the claims which terminate the same.

In the accompanying drawings I have shown my invention in forms which are at present preferred by me, together with illustrations of the character of work which may be accomplished by such a device.

Figure 1 is a plan view of my device in position for use.

Figure 2 is an axial section through the device.

Figure 3 is a view similar to Figure 1, and Figure 4 a view like Figure 2, of the device in a different adjustment.

Figure 5 is an end view of the device.

Figure 6 is an end view of one of the pair of cooperating washers.

Figure 7 is a plan view of a slight modification.

Figure 8 is a side elevation thereof, and Figure 9 an end elevation.

Figure 10 is an axial section through the marking devices, taken on the line 10—10 of Figure 9.

Figure 11 is a view similar to Figure 10 of a slightly modified form.

Figure 12 is an end elevation of the marking units, and Figure 13 an axial section on the line 13—13 of Figure 12, showing a slight modification.

Figure 14 is a plan view on a larger scale, of a further modification, and Figures 15 and 16 are perspective views of elements which may be incorporated into such a modification.

Figure 17 is a simulated signature, which is to be protected, and Figure 18 is a view of the same protected by the preferred form of my device.

Figure 19 is a similar view of a signature protected by a modification.

Figures 20 to 28, inclusive, are illustrations of the various adaptations and patterns capable of accomplishment by my device, the last being accomplished by means of the form shown in Figures 14 and 15.

As will be understood from inspection of the drawings, I propose to alter the surface of a piece of paper which is to be protected by either printing thereon dots, letters, or various characters, or by perforating the paper at spaced points, or by both perforating and imprinting upon the paper between the perforations or in the perforations, as may be preferred. The use of any particular style of marking or imprinting forms no part of my invention, but various forms of marking may be accomplished by means of my device. Therefore, when I speak of the alteration or marking of the surface of the paper, it is understood that any or all of these means are intended.

The marking devices comprise, in the preferred forms, independent spaced points 10, which are formed in the peripheries of disks or rollers 1. These disks or rollers 1, instead of being cut over the surface of a cylinder of some length, are narrow and independent of each other, and may be spaced apart by spacers 11, formed separate from or integral with the rollers 1. The various

rollers are co-axial, and supported in suitable fashion to permit them to roll over the surface of a piece of paper. For this purpose, they may be strung upon a hollow spindle 2 (see Figures 2 and 4), which is threaded at its ends, as indicated at 21. A nut 22 threaded thereon at each end prevents the loss of the several rollers 1, and when desired clamps them together. To enable handling of the composite unit thus described, a handle 3 may be provided, this conveniently comprising a piece of wire doubled upon itself, and having inwardly directed trunnions 30 received within the bore of the hollow spindle 2.

It will be evident that the marking points 10, usually identically spaced on the several rollers 1, may be adjusted relative to the point of the adjacent rollers, and they may be held in such an adjusted position by means of the clamping nut 22, acting through washers 4 and 44. At times it may be desired to mark the paper in a series of wavy lines, and this may be accomplished by making the two washers 4 and 44 tapered, each complementary to the other, and by adjusting them to give a greater or lesser angle to the individual rollers. One of the washers has a key 46 fitting in a corresponding slot in the sleeve 2 to prevent its rotation as the complementary washer is rotated. An index 47, cooperating with a like index 48 on the washer 44, indicates how much the rotatable washer has been moved, relative to the fixed washer. The clamping means, either the nuts 22 in Figures 1 to 5, or the single nut 22 and the terminal flange 20 of Figure 10, keeps the washers in adjusted position. To fix definite relative positions of the washers 4 and 44 they may be provided with complementary notches and radial ribs indicated at 45. Such an arrangement will cause the several rollers 1 to be inclined somewhat relative to any plane normal to the axis of rotation of the marking unit, and will produce an effect like that shown in Figure 18, wherein the several lines of dots 19, which correspond to the several rollers 1, are slightly waved.

If the wavy effect is not desired, the tapered washers 4 and 40 may be shifted to compensate the one for the other, or in the form of Figure 11, may be removed and replaced by washers 41 and 42, having parallel faces. To permit the removal of the washers, the spring arms of the handle 3 are forced apart sufficiently to permit removal of the trunnions 30 from the bore of the sleeve 2. Such an arrangement may produce an effect like that shown in Figure 19, where all of the lines of the marking points are straight.

It may be desired to place the marking points 10 in such a way as to produce a pattern, either of inclined or curved lines trans-

versely of the line of marking, and such has been indicated in various patterns in Figures 20 to 26 inclusive. Thus, the change from one arrangement to another is quickly and easily accomplished by loosening one of the clamping nuts 22, and setting the points 10 according to the pattern desired, whereupon they are held in adjusted position by tightening the clamping nut 22.

As a means permitting the rollers 1 to be free to roll, each independently of the other, and to wobble slightly, I have provided an arrangement such as is shown in Figures 12 and 13. This involves the employment of the tapered washers 4 and 40, one at each end, but in this case I may provide a finger 43 on one or both of these washers, by means of which the one can be tightened against the other to hold the rollers 1 in an adjusted position, or may be quickly slacked off to leave them free, or to permit their adjustment relative to one another. In this form, I have also shown the clamping nut 22 omitted, and replaced by a swaged over head 24. The bores of the rollers 1, being somewhat larger than the sleeve 2, will permit the rollers to wobble unless they are clamped together.

It may be desired to mark the check with characters, initials, or words, and for this purpose I may provide, on the rollers 1 or upon the intermediate washers or spacers 11, characters, as indicated at 15 in Figures 14, 15, and 16. These may be employed alone, if desired, or in combination with the marking points 10.

It will be apparent that various combinations of patterns may be obtained, and in using the sharp marking points or perforating points 10 the check to be perforated is laid upon a resilient material, such as a sheet of rubber, and the series of rollers drawn across it. When only the characters 15 are to be employed they may be of rubber, and will be employed against a hard backing surface.

What I claim as my invention is:

1. A check protector comprising a handle and a plurality of independent rollers supported thereon, means upon the peripheries of said rollers for marking the surface of a piece of paper over which they may be drawn, and means for altering the relative positions of the marking devices on adjacent rollers.

2. A check protector comprising a handle and a plurality of independent rollers supported thereon, means upon the peripheries of said rollers for marking the surface of a piece of paper over which they are rolled, said means being equally spaced on the several rollers, and means permitting setting of the marking devices on one roller slightly in advance of those on an adjacent roller.

3. A check protector comprising a handle

and a plurality of independent rollers coaxially supported and freely rotatable thereon, and having means on their peripheries for altering the surface of a piece of paper over which they may be drawn, and means for tilting said rollers at an angle to a plane normal to the axis of rotation.

4. A check protector comprising a handle and a plurality of independent rollers coaxially supported and freely rotatable thereon, and having means on their peripheries for altering the surface of a piece of paper over which they may be drawn, the bearings for said rollers being loose, permitting each of them to wobble and roll independently of the others, and means for securing said rollers together to roll as a unit.

5. A check protector as in claim 1, the rollers being strung upon and oscillatable about a bearing member, and means for clamping the rollers upon said bearing member in any selected relative position, to roll as a unit.

6. A check protector as in claim 1, including a pair of complementally tapered washers received upon the spindle upon which the rollers are strung, and means for securing the tapered washers and the rollers in selected positions relative to each other.

7. A check protector as in claim 1, including a hollow spindle, upon which the rollers are strung, the handle having a bearing pin received in the bore of said spindle opposite its flange, means to clamp the rollers in selected relative positions therebetween and a pair of complemental and relatively movable tapered washers interposed between the roller at each end and the clamping devices.

8. A check protector comprising a hollow sleeve, a plurality of marking rollers mounted thereon for rotative adjustment thereon, clamping means for holding said rollers upon the sleeve, and a wire handle bent in U-shape, and terminating in inwardly directed trunnions received in the ends of the bore of said sleeve.

Signed at Seattle, Washington, this 10th day of January, 1930.

FRANK J. MATTHEWS.