

July 12, 1938.

F. MARTENS

2,123,514

DEVICE FOR DELIVERING SLIPS OF MEMORANDUM PAPER

Filed March 17, 1936

2 Sheets-Sheet 1

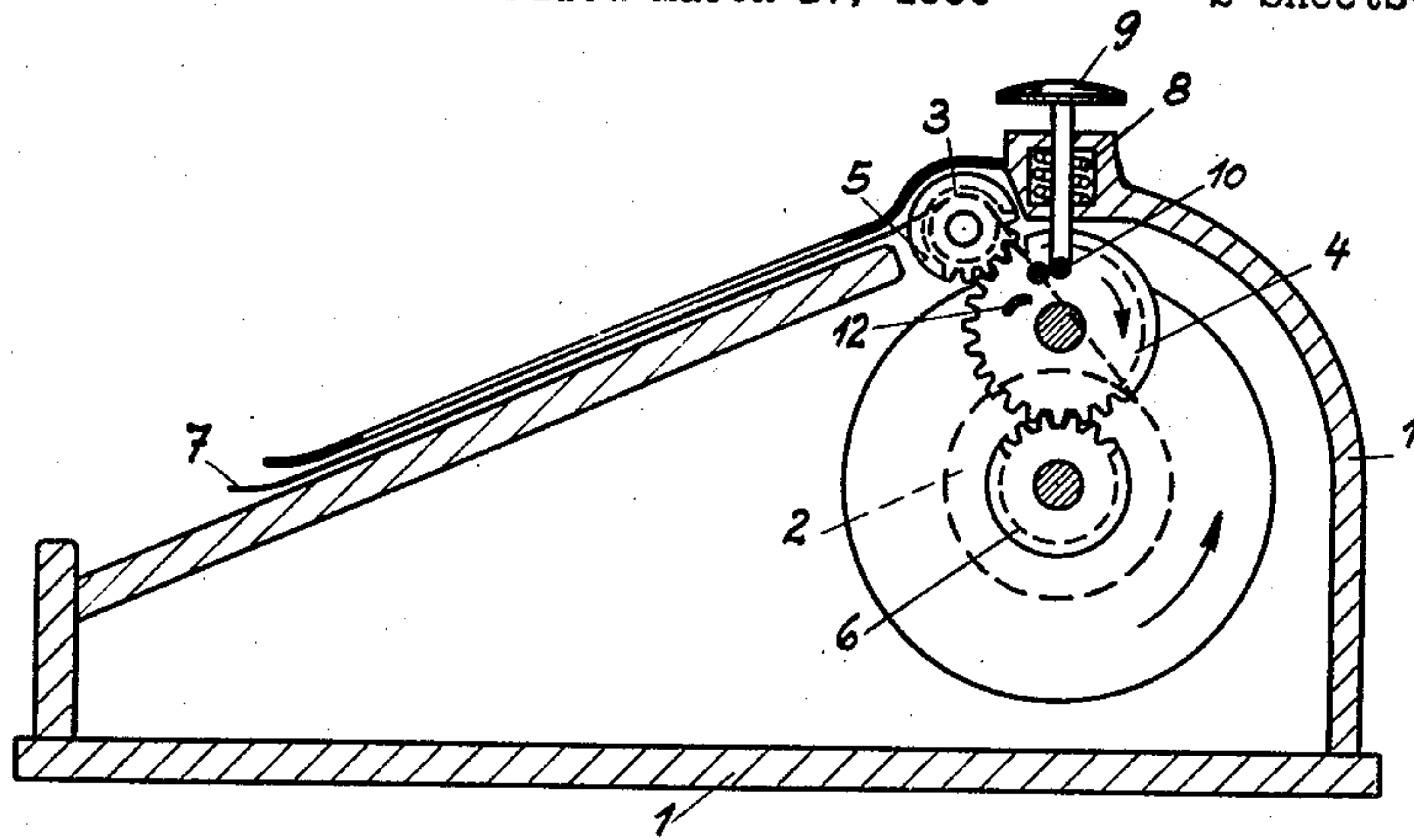


Fig. 2.

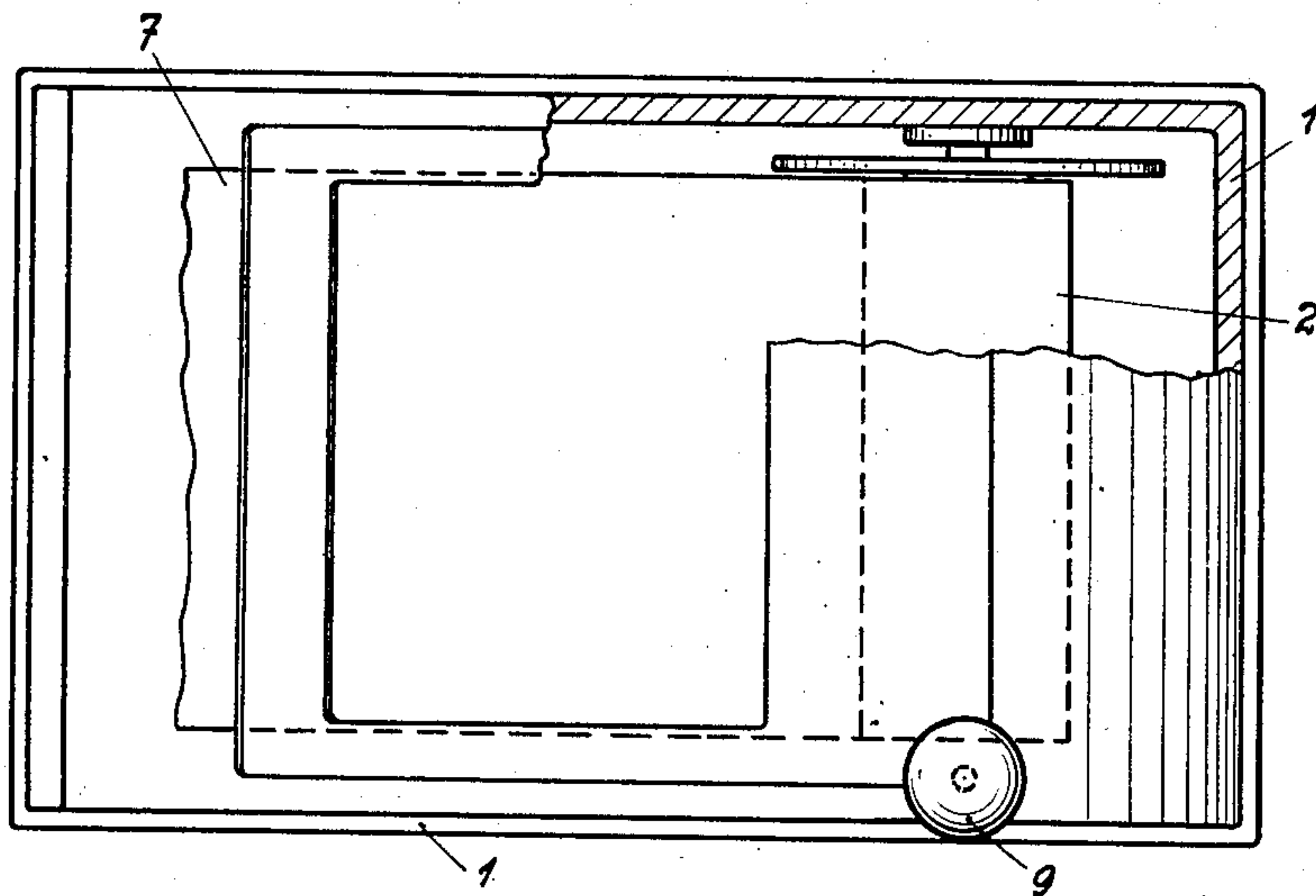


Fig. 1.

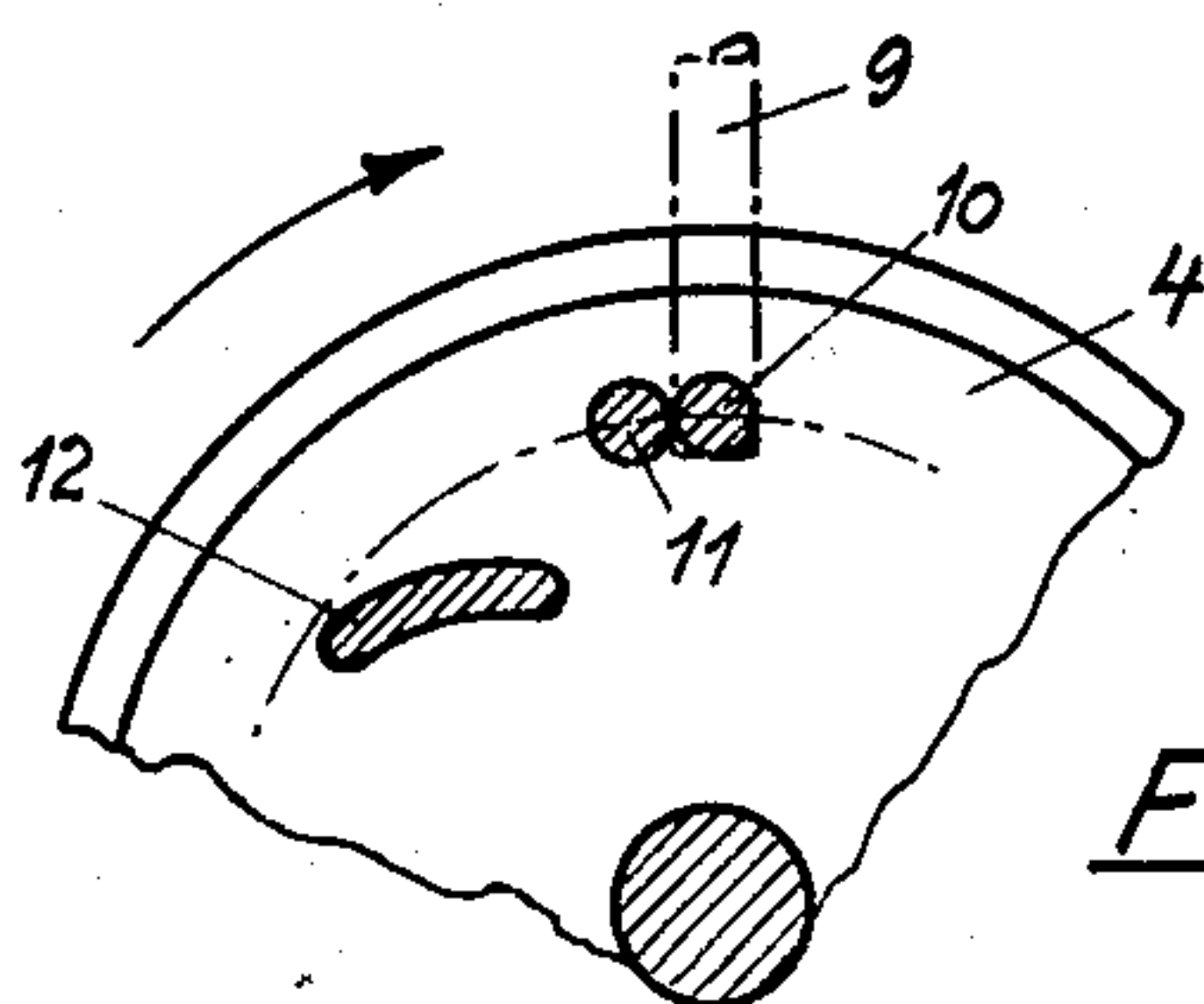


Fig. 3

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ATTORNEYS.

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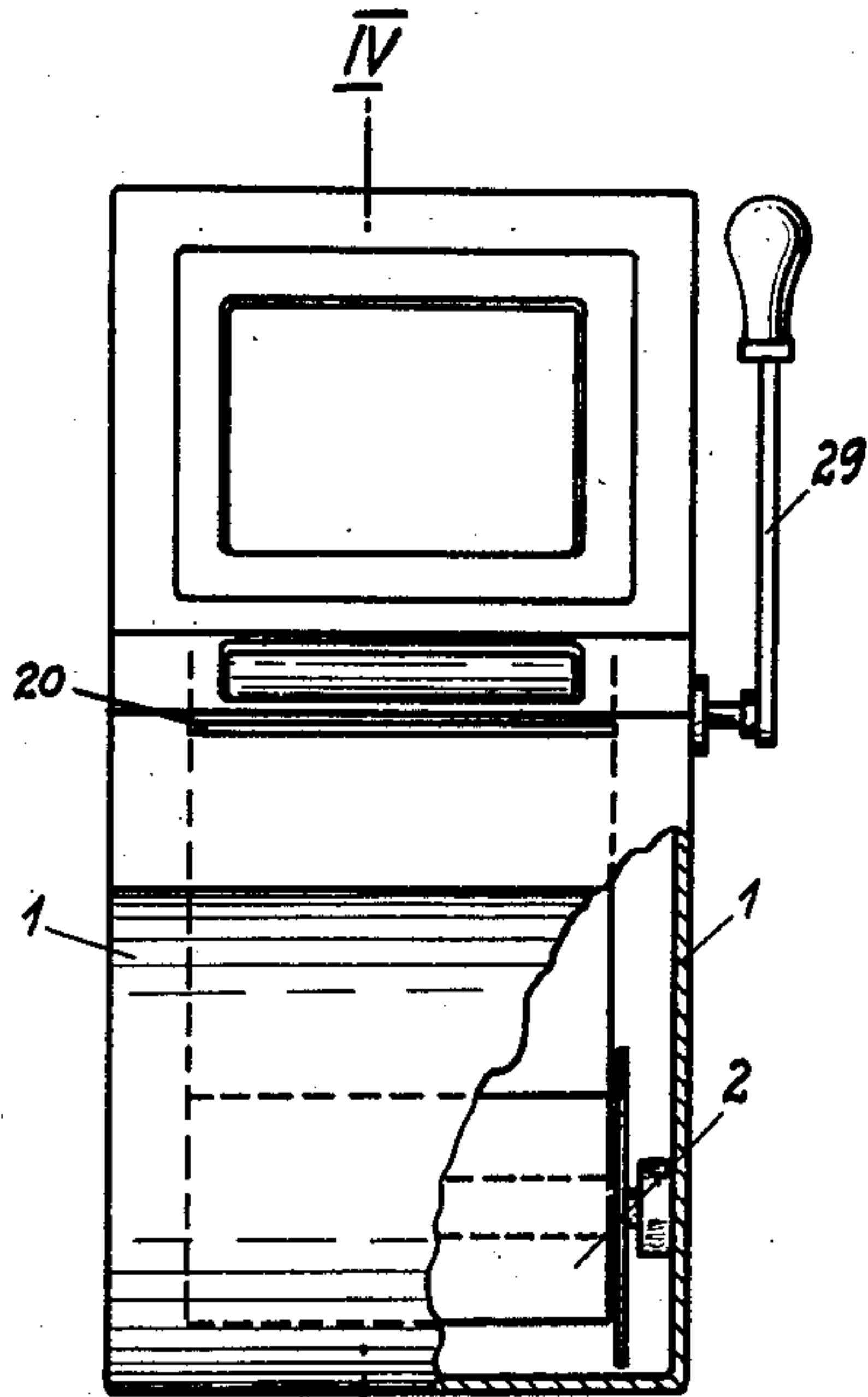
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IV Fig. 4

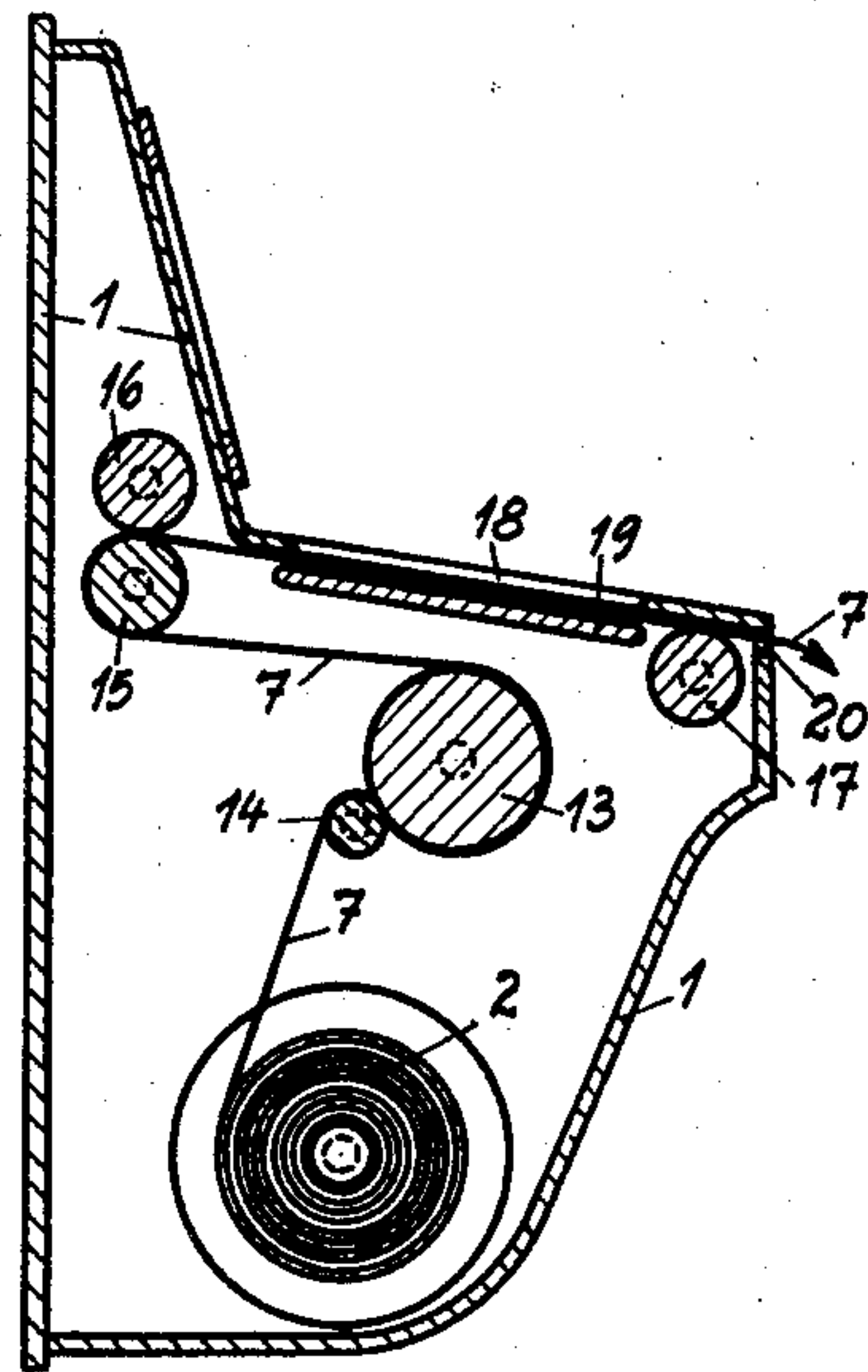


Fig. 5

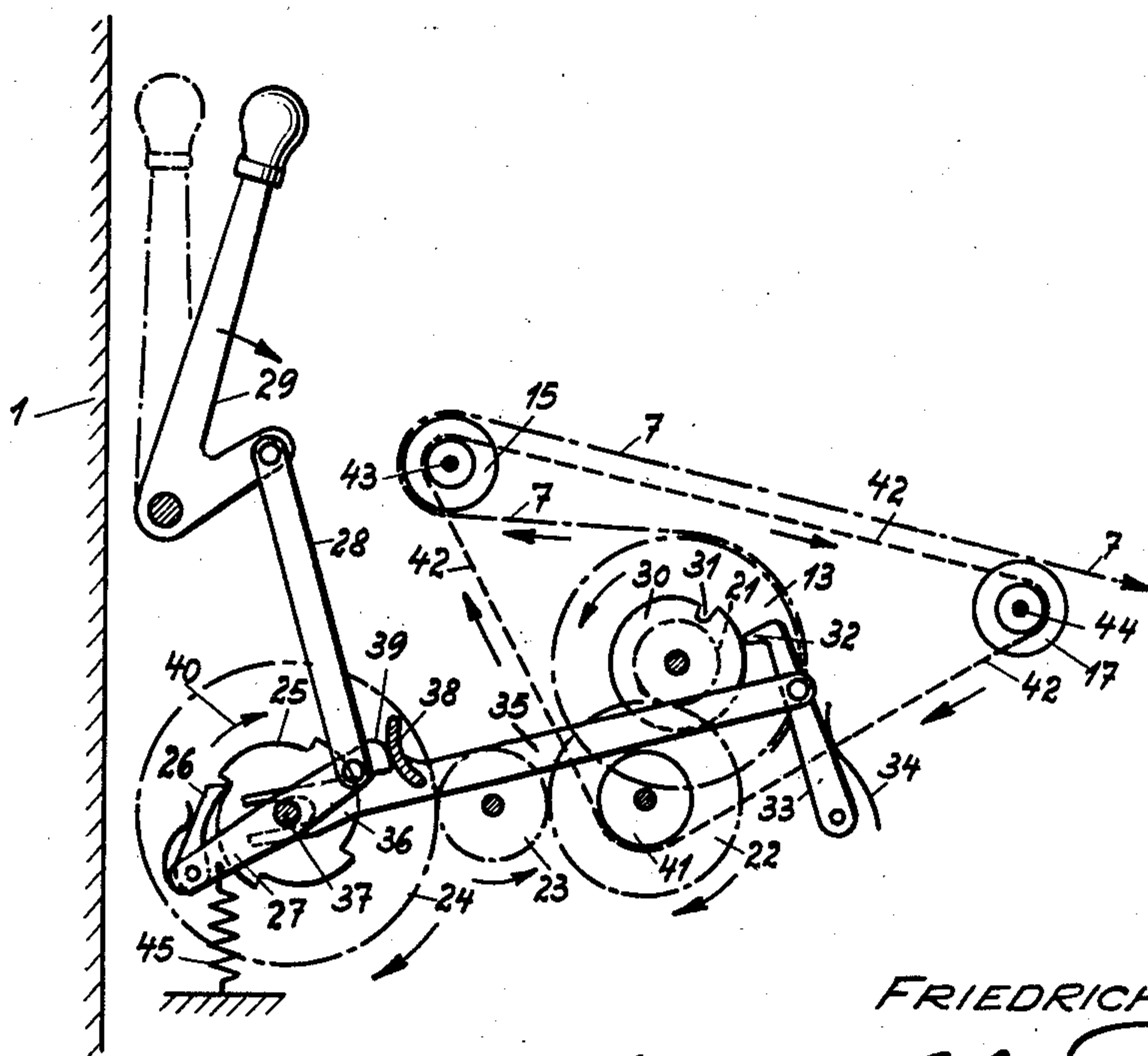


Fig. 6

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UNITED STATES PATENT OFFICE

2,123,514

DEVICE FOR DELIVERING SLIPS OF MEMORANDUM PAPER

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Application March 17, 1936, Serial No. 69,251

5 Claims. (Cl. 281—11)

This invention relates to a device for delivering slips of memorandum paper from a roll wound on a reel and disposed in a closed casing provided with a writing support, for use in public establishments, such as for example a telephone kiosk.

The known devices including bands of paper wound on a reel, part of said paper being exposed over a writing support so that notes may be made thereon, are unsuitable for use in public establishments, because in these devices indefinite lengths of the paper band may be unrolled. Consequently, unauthorized persons are enabled to convert the continuous band of paper to other than its legitimate use, namely the making of notes thereon. On the other hand it is desirable to provide, for example in telephone kiosks, slips of memorandum paper in addition to the writing support which is usually found therein, and the public must be enabled to remove the slip on which notes have been made on leaving the kiosk. Pads of memo paper are difficult, if not impossible, to dispose in such a manner as to be capable of being handled by one hand. Moreover, they also afford the possibility of removal of large quantities of the loose slips by unauthorized persons. It has also been proposed to provide locking devices in connection with memo strip devices comprising a writing support, but in this type of known device the locking is effected in dependence from the movable writing support. They are therefore cumbersome in use and owing to their construction they are also unable to prevent the illegitimate removal of large quantities of memo slips.

The present invention has for its object to provide a simple device for the delivery of single slips of memo paper, which is reliable in operation, free of the aforesaid defects and wherein the possibility is given of covering the costs of the installation of the device and of the memo slips consumed by the users of the telephone kiosks by the application of advertising matter to the individual slips, without the necessity of such costs being borne by the postal authorities or by the users of the kiosks.

With these objects in view and according to the invention a device for delivering slips of memo paper provided with advertising matter comprises a paying out device for the slips which are wound on a reel in the form of a band, said paying out device being combined for cooperation with a locking device in such a manner that upon the locking device being released by means of a handle, knob or the like same will

return into its locking position when a predetermined length of paper has been paid out, the arrangement being such that in said locking position of the locking device no further movement of the paper band is possible.

Two embodiments of delivery device for memo slips according to the invention are illustrated by way of example in the accompanying drawings, wherein:

Fig. 1 is a plan view of one form of device, part of the upper wall of the casing being removed,

Fig. 2 is a sectional side elevation of the same device,

Fig. 3 illustrates the locking means on a larger scale,

Fig. 4 shows another embodiment in front elevation, part of the wall of the casing being broken away,

Fig. 5 is a sectional side elevation of the device shown in Fig. 4, on the line IV—IV of Fig. 4,

Fig. 6 is a diagrammatic representation of the drive mechanism in side elevation.

Referring to Figs. 1 to 3 of the drawings at the far end of the casing 1 having an inclined upper wall adapted to serve as a writing support are disposed the memo band supply reel 2, the guide roller 3 and gear wheels 4, 5 and 6. The gear 5 is fixed to the shaft of the guide roller 3 and the gear 6 is fixed to the shaft of the supply reel 2, while the gear 4 which meshes with the gears 5 and 6 is mounted for rotation in the casing 1. The gear 4 has an abutment 11 which cooperates with the lower end 10 of the stem of a push button 9 acting as locking member and normally held in raised or locking position by a spring 8. In this position the device is locked and the paper strip 7 may not be pulled off the supply reel 2. When it is desired to pull out and detach a slip of memo paper the push button 9 is depressed, whereby the end 10 of its stem is thrown out of engagement with the abutment 11 of the gear 4, so that the paper strip 7 may be pulled out. The movement of the paper strip causes the guide roller 3 and the reel 2 together with their respective gears 5 and 6 to rotate, these gears in turn causing the gear 4 to rotate. The gear 4 has a cam member 12 which is adapted to engage the push button stem end 10 should said stem not for any reason be returned by the spring 8 when same is depressed and when said cam engages said end it causes same to be raised, raising the push button 9, which is then retained in its raised position by the spring 8, and catches the

abutment 11 of the gear 4 preventing the further rotation thereof and the further paying out of memo paper. It will be seen that only a certain length of paper may be pulled out and detached upon each depression of the button 9 and that the button must be again depressed before a fresh slip can be pulled out. The paper strip wound on the reel 2 is divided up into individual slips by transverse lines of perforations disposed at the requisite intervals, said perforations facilitating the detachment of the slips.

The supply reel 2 or the guide roller 3 for the memo slips 7 combined to a paper strip may be associated with a clockwork mechanism or equivalent, so that the paying out of the memo slips is not effected by pulling by hand but by rotation of the supply reel 2 or guide roller 3 by the clockwork or equivalent. In this case it is advisable to provide guide means for the paper strip up to a point beyond the guide roller 3 and to provide a spring pressed counter roller cooperating with the latter. The spring clockwork or equivalent must be wound up from time to time by hand, or an electric motor may be provided for the purpose of effecting the winding up automatically.

Each memo slip is provided on its front and/or rear side with advertising matter, so that the costs of the device and of the memo slips 7 are defrayed by the advertising firms.

Instead of providing a button, lever or the like for actuating the locking device by hand, same may be associated with a coin freed mechanism or may be coupled to the coin freed mechanism of the telephone apparatus, so that the paying out of a memo slip is effected in conjunction with the insertion of a coin into the coin freed mechanism of the telephone apparatus or of the memo slip delivering device. In this case the movable parts are released by the coin freed mechanism, but the subsequent locking is effected by a member such as the abutment 11 or equivalent device adapted to become operative in conjunction with the guide roller 3 or the supply reel 2.

Referring to Figs. 4 to 6 of the drawings, again there is provided a casing 1 and a memo slip supply reel 2, the memo slips combined to a paper strip being indicated at 7, as in the previous embodiment. From the supply reel 2 the paper strip 7 is guided over a feed roller 13 cooperating with a spring pressed roller 14, a guide and feed roller 15 cooperating with a spring pressed presser roller 16 and a further feed and guide roller 17 which spring is pressed to the underside of the top wall of the casing 1. Underneath a window 18 in said top wall a writing support 19 for the individual memo slips 7 is disposed. At the front side of the portion of the casing 1 serving as a writing desk an opening or slot 20 is disposed for the issue of the individual memo slips 7.

The feed roller 13 is coupled through a gearing 21, 22, 23, 24 (Fig. 6) with a step-by-step feed mechanism which comprises a ratchet wheel 25 fast on the shaft of the gear 24, a spring pressed feed pawl 26, a lever 27 pivotally carrying said pawl and a hand lever 29 connected to said lever 27 by means of a link 28. The lever system 27, 28, 29 is resiliently held in initial position by a spring 45. The hand lever 29 is in the form of a bell crank lever and is mounted outside the closed container or casing 1 (Fig. 4) in such a manner as to be capable of performing angular movement corresponding to the length of paper to be paid out at any one time. The shaft of the gear 21 and feed roller 13 is mounted in the side walls

of the casing 1 and fixedly carries a locking disc 30 having a recess 31, said locking disc cooperating with the projection 32 of a lever 33 rockably mounted on the wall of the casing 1 and pressed with its projection 32 on to the periphery of the locking disc 30 by a spring 34. Said lever 33 is connected by a link 35 pivoted thereto to the step-by-step feed device 25, 26. The free end of the link 35 is forked at 36 and embraces the shaft 37 of the gear 24 of the ratchet wheel 25 and has a follower cam 38 adapted to cooperate with the end of the lever 27.

When the hand lever 29 is pulled in the direction of the arrow, the lever 27 is caused by the link 28 to rock in the direction indicated by the arrow 40 and the end 39 of the lever 27 acts upon the follower cam 38 and causes same to move to the right (Fig. 6), thereby causing the projection 32 of the lever 33 to be lifted out of the recess 31 of the disc 30, so that the gearing 21 to 24 and the feed roller 13 are released and are enabled to rotate with the consequent paying out of a length of paper strip corresponding to the length of a single memo slip. This is effected by the further movement of the hand lever 29 which causes the feed roller 13 through the intermediary of the step-by-step feed device 25, 26 and the gearing 21 to 24 to perform partial rotation corresponding to the length of a single memo slip. At the end of the drive movement of the hand lever 29 the projection 32 of the lever 33, which has meanwhile been released by the follower cam 38, engages the recess 31 of the disc 30 under the action of the spring 34, so that the device becomes locked and further paying out of the paper strip becomes impossible. The feed roller 13 is operatively connected to the rollers 15 and 17 by means of a chain, rope or the like 42, which passes around sprockets or pulleys 41, 43 and 44 fixed respectively to the shafts of the gear 22 and of the rollers 15 and 17. Upon rotation of the feed roller 13 the rollers 15 and 17 will therefore also be driven and will cause the memo slips 7 to be paid out. The memo slip issuing through the slot 20 and preferably provided at its upper edge or on its rear side with advertising matter may be torn off at the preferably sharpened edge of the delivery slot 20. The fresh memo slip on the writing support 18 may then be written upon, ejected through the slot 20 by pulling the hand lever 29 and torn off.

The casing 1 comprises a back wall to be fixed to the wall of the premises where the device is to be erected and a hollow cover portion detachably mounted thereon. For example, the cover may be mounted on the back wall by means of hinges at its upper or lower end and fixed thereto at the free end of a spring catch or the like or a key operated lock, so that when the lock is opened the cover portion itself may be opened and the paper roll exchanged or the supply replenished. Preferably, the supply reel 2 is mounted in saddle bearings fixed to the side of the casing to facilitate replenishment. The end of the fresh roll of paper is then passed through the feed rolls in the manner shown in Fig. 5 until said end is visible in the delivery slot 20. The drive, feed and locking device may also be mounted in a separate frame having side members and adapted to be fixed to the back plate, in which case the front portion of the casing is in the form of a cover shell hingedly and lockably mounted on the back plate as already described.

The paper band may be fed forward in the manner already described, or its edges may be

perforated and feed cogs engaging in the perforations may be provided. The exact forward movement of the paper strip corresponding to the length of a single memo slip may also be assured
 5 by the provision at the requisite intervals of transverse perforations adapted to be engaged by a row of teeth or pegs provided on one or more of the feed rollers. The circumference of the feed roller 13 may correspond to the length of one
 10 or more, say three, memo slips, a corresponding number of rows of teeth or pegs being provided thereon.

I claim:—

1. A device for delivering memo-slips printed
 15 with advertising matter at public places, comprising a reel adapted to carry a wound paper strip composed of memo-slips, a closed casing containing said reel and including a writing support, means for guiding the paper strip to said
 20 writing support, a gearing coupling said reel to said guide means, locking means combined for co-operation with said strip carrying means, means for releasing said locking means and advancing said paper strip in the delivering direction and
 25 means for causing said locking means to assume their locking position after predetermined length of paper strip has been paid out of the device.

2. A device for delivering memo-slips printed with advertising matter at public places, comprising a reel adapted to carry a wound paper
 30 strip composed of memo-slips, a closed casing containing said reel and including a writing support, means for guiding the paper strip to said writing support, a gearing coupling said reel to
 35 said guide means, locking means combined for co-operation with said gearing, means for releasing said locking means and advancing said paper strip in the delivering direction for a certain length and means for causing said locking means
 40 to assume their locking position after the movement of the paper strip in the length of one memo slip to be paid out of the device.

3. A device for delivering memo-slips printed with advertising matter, comprising a reel on
 45 which a paper strip composed of memo-slips is

adapted to be wound, a closed casing containing said reel and including a writing support, an abutment member adapted to rotate as and when said reel rotates, a locking member adapted normally to prevent said abutment member from
 5 rotation, a release member adapted to influence said locking member so as to permit said abutment member to rotate and a spring normally holding said release member in one end position of its movement. 10

4. A device for delivering memo-slips printed with advertising matter, comprising a reel on which a paper strip composed of memo-slips is adapted to be wound, a closed casing containing
 15 said reel and including a writing support an abutment member adapted to rotate as and when said reel rotates, a locking member adapted normally to prevent said member from rotating a driving member for advancing said paper strip in the
 20 delivering direction, a connection between said driving member and said locking member whereby the driving member influences the locking member prior to advancing of the paper strip to permit said abutment member to rotate with
 25 said reel.

5. A device for delivering memo-slips printed with advertising matter, comprising a reel on which a paper strip composed of memo-slips is adapted to be wound, a closed casing containing
 30 said reel and including a writing support, a plurality of feed rolls operatively connected to said reel and to one another for advancing the paper strip, an abutment member adapted to rotate as and when said reel rotates, a locking member
 35 adapted normally to prevent said abutment member from rotation, a ratchet wheel connected to said reel, a pawl adapted to operate said ratchet, a hand lever adapted to operate said pawl and to release said locking member prior to operating
 40 said pawl and a spring normally holding said hand lever in the position wherein it does not influence said locking member and does not operate said pawl.

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