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1,757,173

COMBINED CUTTER AND PRESSURE ROLLER DEVICE

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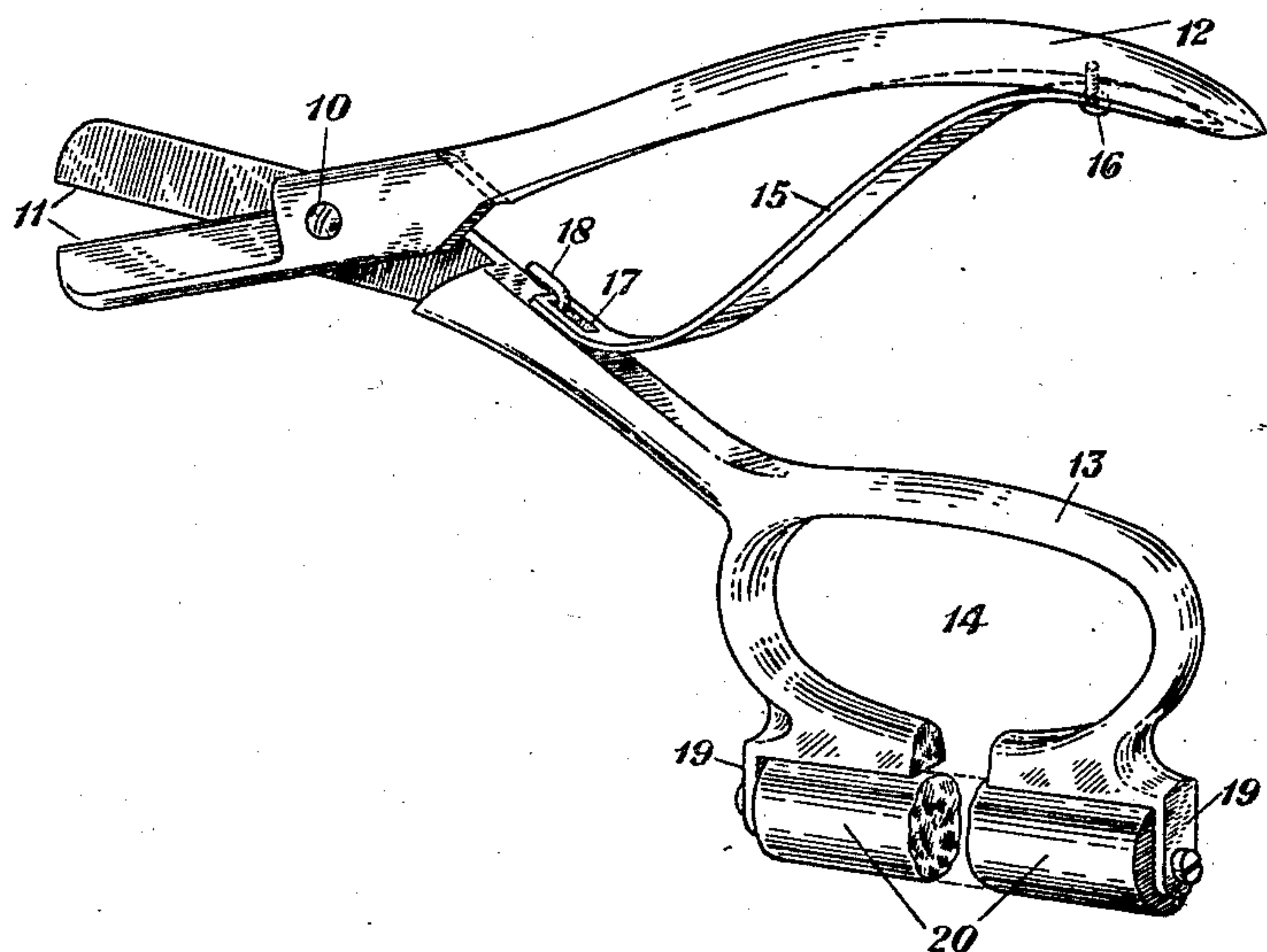


Fig. 1

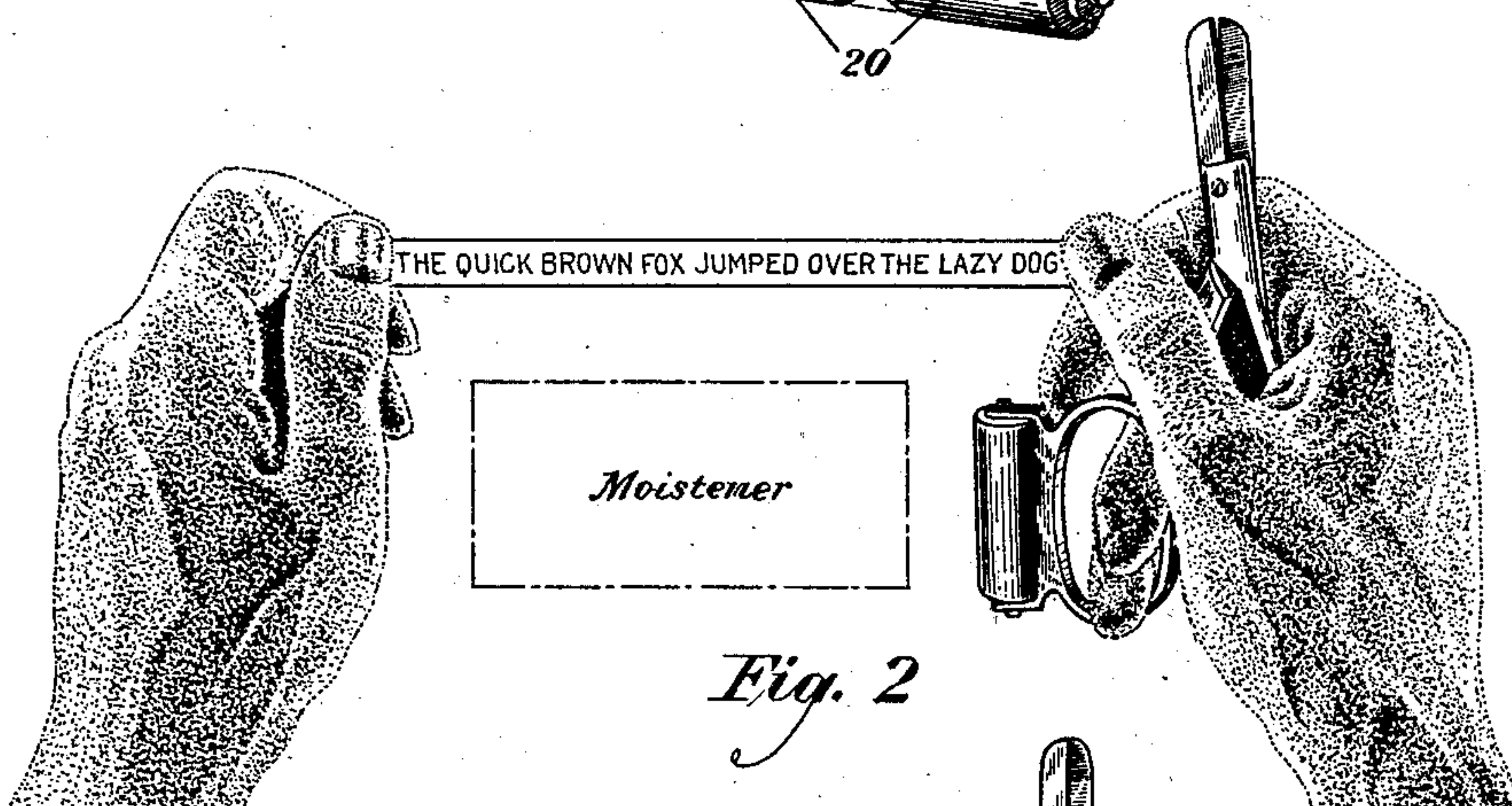


Fig. 2

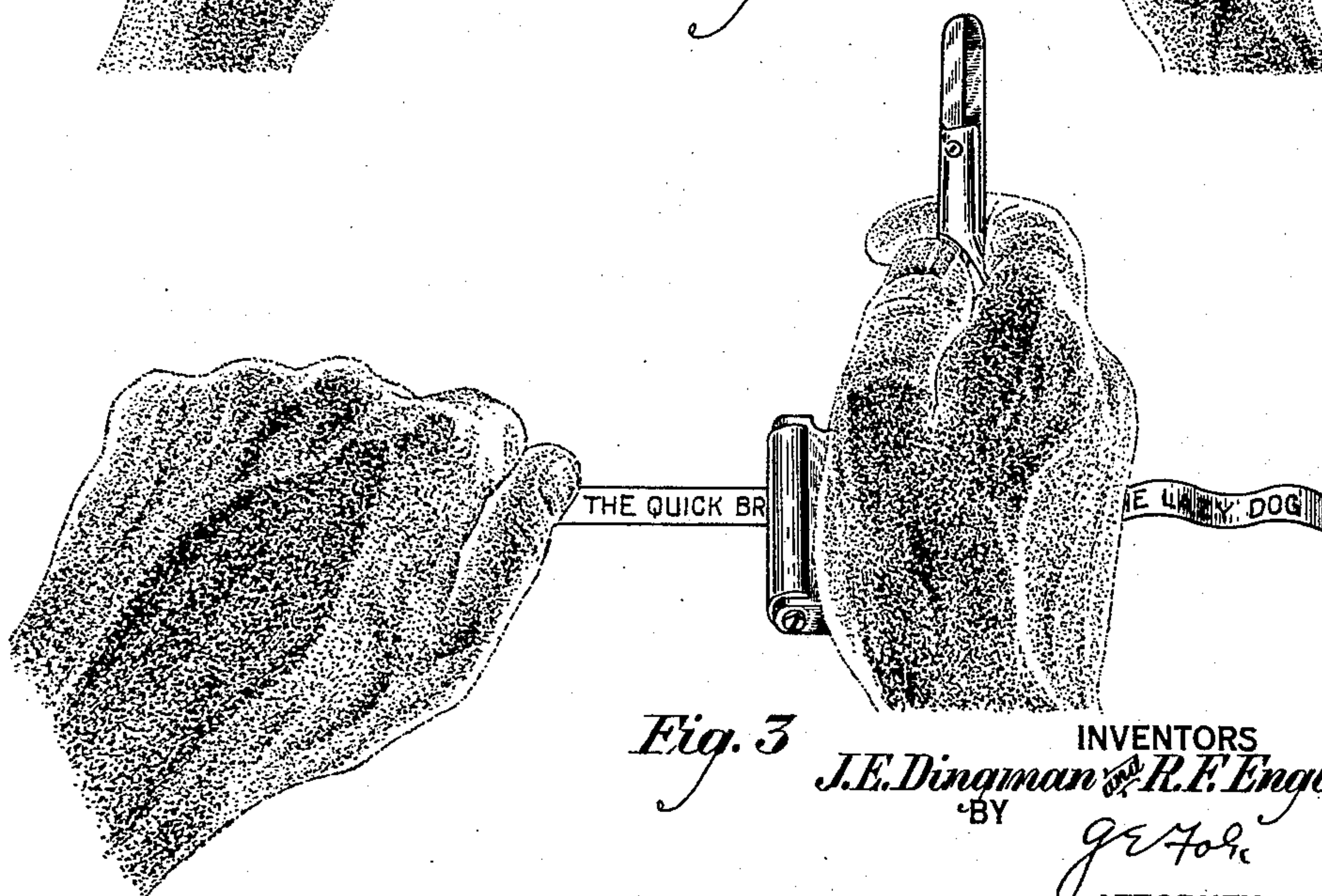


Fig. 3

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COMBINED CUTTER AND PRESSURE ROLLER DEVICE

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In printing telegraph systems, received messages are printed on a tape and fed from a roll associated with a machine which performs the printing operation. The message is printed on the tape as it is advanced through the printer, and said tape is cut in strips of suitable lengths upon leaving the printer. One side of the tape has a gummed surface, and by moistening this surface and applying pressure to the opposite side, the tape may be caused to adhere to any suitable surface. The severed strips of tape are thus mounted one beneath the other upon a receiving blank, for instance, and take the form of a telegram, and in such form may be more easily read and filed. In brokers' and other service in which tape printers are used, it is of the utmost importance that the message be made available in as short a time as possible after coming in over the wire. It is therefore desirable that the tape be severed as close as possible to the printer and that such severed tape be mounted in message form as expeditiously as possible.

In accordance with one of the objects of the present invention, there is provided a device which will sever strips of tape and apply pressure to such strips to cause their adhesion to a supporting surface.

Another object consists in the provision of a device of this character which is simple and comparatively inexpensive.

A further object consists in providing a device of this type which is light in weight and readily manipulated without lost motion to accelerate the speed of operations of cutting and pasting strips of printer tape upon a supporting surface.

These and further objects will be apparent from the following description, when considered in connection with the accompanying drawing in which one embodiment of the invention is illustrated.

The device is shown in Figure 1 of the drawing in side elevation; Fig. 2 shows the position in which the device is held just after the tape has been cut and also shows the severed strip held by the fingers of each hand preparatory to applying it to a surface; and Fig. 3 shows the roller in the operation of

applying rolling pressure to a strip of severed tape to cause its adhesion to a supporting surface.

Referring to the drawing, the improved device is shown as being composed of two portions which are pivoted together by a screw 10, or the like. Blade members 11, 11, extend from the pivoted portion in one direction, and each is provided with the usual edges common to scissors which are adapted to cut from opposite sides an object placed between them. The blades 11 are preferably of short length to permit them to be quickly brought together to facilitate the cutting of the tape with promptness just as it emerges from the printer. The ends of the improved device opposite the blade members 11 form handle members. One of the handle members 12 is of an arcuate shape similar to the handle ordinarily employed for devices such as pliers. The other handle member 13 is of a character commonly employed in connection with scissors, and is provided with a loop portion 14. It will be noted that the handle 12 permits it to be readily held in the palm of the hand and operated, if desired, without the additional aid of any fingers other than those which hold the other handle 13, as may be seen by reference to Fig. 2. The handle member 13, by means of the loop portion 14, provides a finger-hold whereby the device may be readily grasped and held through the various operations of cutting and pasting the strips of tape, to be presently described.

A spring member 15 is provided between the handles 12 and 13 for the usual purpose of providing tension to restore these members to normal position after they have been brought together in a cutting operation so that the blade members 12 resume their normal separated position. The spring member 15 should be of such material that it will provide the necessary tension for this purpose, and also be of sufficient ruggedness that it will not have any tendency to snap or break. One end of the spring 15 is shown as secured to the handle 12 by means of a screw 16, and the other end of the spring is provided with a

slot 17 in which an angular stud 18, affixed to the handle 13, is positioned.

The handle member 13 is provided at its outer side with a thickened portion from which extends a pair of parallel brackets or flanges 19, 19. A cylindrical roller 20 is positioned between these flanges and is suitably journaled thereto by means of screws, or the like, which pass through the members 19 into a threaded opening provided in each end of the roller. The roller is shown as being of solid construction, but of course may be of tubular form if desired and provided with solid end walls. The roller is so journaled that it may be readily rotated, and the material used for such roller should be of suitable character, such as brass or the like, so that it will not become rusty and cause the discoloration or the curling of the tape upon which it operates.

As previously indicated, the handle 12 is of such shape that it fits the palm of the hand and is positioned therein during the cutting operation, leaving the thumb, index and second fingers free. The other fingers are inserted through the loop portion so that the cutting operation may be performed by squeezing the handles together to cause the closure of the blades and cut the tape placed between them. After the cutting operation has been performed, the severed end of the tape is held by the disengaged thumb and index finger of one hand, while the improved device is held by other fingers of the same hand as pointed out above. The opposite end of the tape is held by the fingers of the other hand, as illustrated in Fig. 2. The gummed side of a strip of severed tape is then drawn over a suitable moisture applicator in a direction toward the left, and then placed in position upon a surface such as a message blank.

In Fig. 3, which illustrates the application of the pressure roller to the severed strip to cause its adhesion to a message blank or like supporting surface, it will be observed that it is only necessary to place the message strip in the position it is to occupy. The improved device, which has been retained in one hand during the entire operation, is then caused to apply pressure by means of its roller to the strip, and as said roller is advanced to the right, it causes the adhesion of said strip to the message blank. These operations may be repeated until the series of strips containing the entire message are pasted on the message blank.

What is claimed is:

1. In a cutter and pressure device for strips, the combination of cutting blades and handle members, and a roller attached to one of the handle members, said roller having its axis in the plane of motion of the cutting blades, whereby the handle member to which the roller is attached constitutes a fulcrum

about which a blade may be rotated during the operation of a cutting a strip, said handle member also serving to apply pressure to the roller to cause adhesion of the severed strip of paper to a surface.

2. In a cutter and pressure device, the combination of cutting blades and handle members, one of said handle members being of arcuate form and only the other handle member being provided with a loop portion, means rotatably associated with said loop portion and having its axis in the plane of motion of the cutting blades and being substantially parallel to the longer diameter of the loop portion and being adapted to apply pressure to gummed paper as it travels thereover to cause its adhesion to a surface, and tension means connected with the handle member for normally maintaining the cutting blades in separated relation.

3. In a cutter and roller device for tapes and the like, the combination of a cutting implement comprising two portions pivoted together and having blades at one end to cut from opposite sides against a tape placed between them, handle members at the other ends of said portions, one of said handle members being provided with a loop portion adapted to be grasped by certain fingers of the hand, the other of said handle members being of such shape as to fit the palm of the hand, tension means associated with said handle members to maintain said last mentioned member against the palm of the hand, so that the cutting operation takes place by squeezing said handle members together between the palm of the hand and the fingers inserted in said loop, thereby leaving the thumb and index finger free to grasp the tape when severed, and a roller having its axis in the plane of motion of the blades and being substantially parallel to the longer diameter of the loop portion, whereby when the tape is severed the handle members may be grasped between the palm of the hand and the fingers extending through the loop portion to manipulate the roller to apply rolling pressure to the severed tape.

In testimony whereof, we have signed our names to this specification this 9th day of May, 1928.

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