Jan. 3, 1956 J. A. RAMSEY, SR 2,728,932

MARKING DEVICE

Filed June 30, 1951

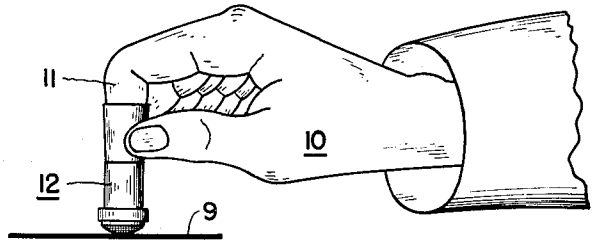


Fig. 1

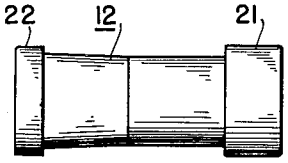


Fig. 2

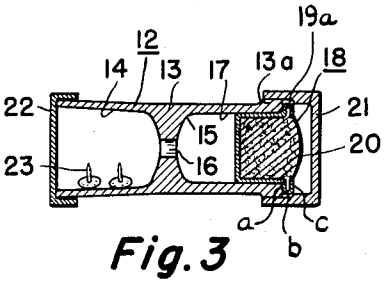


Fig. 3

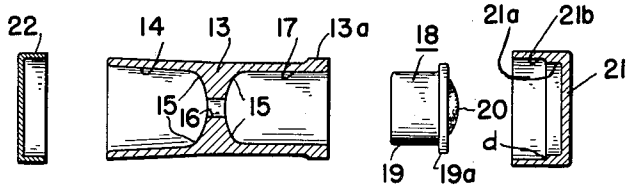


Fig. 4

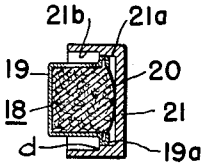


Fig. 5

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MARKING DEVICE

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5 Claims. (Cl. 15—227)

This invention relates to a new and improved form of marking device and particularly, to a simple and practical form of device which may be worn on the forefinger or thumb of the user.

It is recognized that there are various types of marking devices in the art, but I have found that such devices have not been practical for general usage. I have determined that a device for this purpose should be capable of being carried in the pocket of the user without damage to the clothing; it should be of a simple and replaceable type that will always be available for immediate usage; its marking point or spot should be protected from deterioration and rub-off when the device is not in use; it should eliminate the need for an ink feed; and it should be capable of easy and quick adaptation to utilize ink pads and the like of different colors.

It has thus been an object of my invention to provide a new and improved form of marking device that will meet the above and other requirements;

Another object has been to provide a simple and practical form of marking device that can be worn on the end of a finger of the user, so that his hands can be relatively free for other work;

These and many other objects of my invention will appear from the following description of the illustrated embodiment thereof.

In the drawings,

Figure 1 is a side view in elevation illustrating how a device of my invention may be employed;

Figure 2 is an enlarged side view in elevation of the device of Figure 1 with end closure caps in position;

Figure 3 is a vertical section in elevation through the device of Figure 2;

Figure 4 is an exploded view showing parts of the device of my invention in a separated relationship;

Figure 5 is a view on the scale of Figure 3, showing a marking unit with a closure therefore and which are employed with the device of Figure 3.

Referring to Figure 1, I have shown an article **9** being spotted or marked by a device **12** of my invention that is frictionally held in position on an index finger **11** of the hand **10** of an operator. This illustrates that the device **12** can be easily operated by one finger of the hand (index finger shown), its relative size, and how it can be guided by the thumb during a stamping or marking operation. It leaves the hand **10** and the other fingers comparatively free and the operator may do other work while the device **12** is retained in position on the finger **11** between marking operations. A finger of the left hand of a right-handed operator may be used to position the device.

Referring to Figures 2, 3 and 4, the device **12** consists of a somewhat cylindrical-like holder body part **13**, a marking part **18**, and closure cap parts **21** and **22**. One end portion or half of the body part **13** is slightly conical in shape and has a cone-shaped, open end bore **14** to receive the finger **11** of the operator and frictionally retain its position thereon. It will be noted that the bore **14** is closed off by a rounded-off side of a central abutment wall **15**. The open end of the bore **14** may be closed by a cap element **22** when the device is not in use. Thumb tacks **23**, tabs, or gum discs, etc., may be carried in the compartment defined by the bore **14** when the device is not in use.

The other half or end portion of the body part **13** is of cylindrical shape and has a cylindrical bore **17** therein that is open to its opposite end. An inner end of this bore is also closed off by the central abutment wall **15** which has a small hole **16** therethrough to by-pass a knock-out wire, pin or match stick that may be employed to facilitate the removal of a worn out marking part **18**. The bore **17** is adapted to slidably-removably receive the spotting or marking part **18** thereon. An outwardly-projecting annular flange **13***a* is provided on the body part **13** about its outer, end periphery (adjacent the bore **17**) to slidably-frictionally receive a cup-shaped closure cap **21**.

The marking part **18** has a cup or hat-shaped retaining portion **19** within which an ink pad or marking portion **20** of saturated felt or other suitable marking material is adapted to be positioned. A piece of chalk or crayon may be inserted in place of the pad **20** when needed. The retaining cup **19** has an outwardly bent-up and doubled-over, flexible ring flange portion **19***a* which when the part **18** is pushed within the bore **17**, is adapted to abut against a front ledge of the flange **13***a*.

The closure cap **21** has an enlarged, outer cylindrical bore portion **21***b* which is adapted to slidably-frictionally engage the flange **13***a* and somewhat loosely by-pass the flexible, annular end flange **19***a*. An inner, smaller bore **21***a*, adjacent its end or bottom portion, is adapted to slidably-frictionally receive the flange **19***a* (see Figure 5) when the marking part **18** is carried separately. The bores **21***a* and **21***b* provide or define an abutment portion within the cap **21**. As shown in Figure 3, the flexible flange **19***a* is of slightly larger diameter than the bore **21***a*, so that it will normally rest against the abutment portion and its marking pad will be in a spaced relationship with the bottom wall portion of the cap **21**. However, when as shown in Figure 5, the marking part is to be carried separately, the bore **21***a* may be forced over the flange **19***a* (flexing it inwardly) to hold the cap tightly in position over the cup-shaped holder **19**. That is, I contemplate providing a series of marking parts **18** of different colors such as red, white, blue, green, yellow, etc. and then to insert them into the bore **17** as they are needed for particular applications or to replace worn out or exhausted marking parts **18**.

As shown in Figure 3, the peripheral rim or ring flange **19***a* forms a flexible ring flange of inverted U-shape about the open end of the marking cup **19** and comprises inner and outer, spaced-apart and transversely-outwardly extending wall or leg portions *a* and *c* connected together by a bent-over shoulder or base and spacer portion *b*. This provides a flexible construction such that the flange **19***a* (whose base portion *b* is shown of only slightly larger diameter than the inner bore portion **21***a* of the cap **21** and thus, than the diameter of the internal abutment shoulder *d* that is defined by its inner bore portion **21***a* and the outer bore portion **21***b*) may be flexed inwardly and slide past the shoulder *d* to securely mount the marking unit **18** within the cap **21**, so that the marking unit may be removed from the bore **17** of the holder body **13** within the closure cap **21** of cup shape. The flange **19***a* also provides an internal locking groove or valley to secure the marking portion or material **20** in place within the cup **19**. It will be noted from Figure 5 of the drawings that the internal abutment shoulder *d* of the cap **21**, when forced over the base portion *b* of the ring flange **19***a*, flexes it radially-inwardly and causes it to move into sliding abutment with the inner bore portion **21***a*

of the cap. As a result, the marking unit **18** may be removed from the holder body **13** without employing a push-out in the hole **16**.

A second cap **22** frictionally fits over the other extending end portion of the body member **13** to close off the bore **14** and retain any suitable means such as **23** therein when the device **12** is being carried in the pocket of the user.

I have found this device handy in marking drawings and blue prints with one color to indicate the job to which they pertain. I have also found it very useful in connection with wiring operations, where a plurality of wires are to be threaded through a conduit, insulator, or cable. That is, the device can be used to stamp opposite ends of each wire with one color before the wires are threaded through the conduit, so that proper connections can be made at a switch box, for example, without guessing as to which lead each wire represents.

Although a number of complete units **12** such as shown in Figure 2 may be made available, I prefer, in ordinary usage, to provide one holder body **13** and a plurality of different colored spotting parts or units **18**, such as shown in Figure 5, which can be readily replaced within the body **13**. The hole **16** facilitates the removal of the marking part **18**, since a stiff wire or match stick can be inserted to push the part out of the bore **17**.

As shown in Figure 1, the device of my invention can be worn by the user with a minimum interference with other operations of his hands, such as threading wire through a conduit, and will stay in position on his finger or thumb by reason of the thimble-like shape of the bore **14**. The double use of the cap **21** enables safe carrying of the spotting unit parts **18** of Figure 5 as well as of a complete unit **12** of Figure 3. The tight fitting relationship of the cap **21** keeps dirt and air away from the spotting end of the marking felt or insert **20**, except when it is in use.

It will be noted from Figure 1 taken in view of Figure 4 that the size and length of my device and particularly, of the outwardly-diverging cone-shaped bore **14**, is such that the device fits over and encloses the tip end portion of a first phalanx of a finger of a user and freely permits the user to bend his first knuckle which connects the first phalanx with the second phalanx of his finger. It also permits the user to easily steady the device with his thumb, as shown in Figure 1. It will also appear that the centrally-located, separating, or abutment wall **15** is rounded-out in a concave manner to comfortably receive the tip end of the first phalanx of the finger of the user and enable the user to exert a full down pressure on the unit during a marking operation. As shown in Figure 4, a longitudinal or axial section through the holder body **13** presents a double U-shape with its cone-shaped bore **14** and cylindrical bore **17**. As shown particularly in Figure 3, the radially-outwardly projecting abutment or flange portion **19***a* about the cup **19** of the marking part which is located adjacent its open end, limits the sliding-frictional insertion of the cup **18** within the bore **17** by reason of its abutment with the end wall of the bore **17** as surmounted or reinforced by the flange **13***a*.

What I claim is:

1. An improved marking device of the character shown and described which comprises, a holding body part of substantially cylindrical shape and limited longitudinal extent such that it may be readily carried in the pocket of a purse or of clothing being worn, a central abutment wall extending across said body part internally thereof; a pair of bore walls extending longitudinally along said body part in opposite directions from said abutment wall and being open to opposite ends of said body part, one of said bore walls defining a thimble-like finger-tip-receiving compartment portion with said abutment wall, the other of said bore walls defining a marking-unit-carrying and supporting compartment portion with said abutment wall and having an outer rim end portion; a self-contained marking unit having a retaining cup portion and an endwise-projecting marking portion mounted within said cup portion to project outwardly therefrom; a flexible peripheral ring flange about said cup portion at its open end said ring flange being U-shaped in transverse cross-section and having a pair of transversely-extending inner and outer leg portions and a connecting base portion; said cup portion being slidable in abutment with and internally along said other bore wall until the inner leg portion of said flexible ring flange abuts the outer rim end portion of said other bore wall to flexibly-removably mount said marking unit within the supporting compartment portion of said holding body; a closure cap of cup-shape having an inner bore portion of smaller diameter and an outer open-end bore portion of larger diameter defining an intermediate internal abutment shoulder therein, said outer bore portion being slidable in abutment with and over and along the outer rim end portion of said other bore wall until said internal abutment shoulder abuts said flexible ring flange of said marking unit; the base portion of said flexible ring flange having only a slightly larger diameter than said inner bore portion of said closure cap to be flexed radially-inwardly by and slide along said abutment shoulder into sliding engagement with said inner bore portion of said closure cap when its said abutment shoulder is forced thereover.

2. An improved marking device of the character described which comprises, a holding body part of substantially cylindrical shape and limited longitudinal extent such that it may readily be carried in the pocket of a purse or clothing being worn, a central abutment wall extending transversely across said body part internally thereof; a pair of bore walls extending longitudinally along said body part in opposite directions from said abutment wall and being open to opposite ends of said body part, one of said bore walls defining a thimble-like finger-tip-receiving compartment portion with said abutment wall, the other of said bore walls defining a marking-unit-carrying and supporting compartment portion with said abutment wall and having an outer rim end portion about its open end; a self-contained marking unit having a retaining cup portion and an endwise-projecting marking portion mounted within said cup portion to project longitudinally-outwardly therefrom; a peripheral ring flange about said cup portion at its open end; said cup portion being slidable in abutment with and internally along said other bore wall until said ring flange abuts the outer rim end portion of said other bore wall to removaly mount said marking unit within the supporting compartment portion of said holding body; said abutment wall having a central passageway therethrough connecting the finger compartment portion to the supporting compartment portion to pass a knock-out element therethrough from the finger compartment for pushing said marking unit out of its mounted position within the supporting compartment portion; a closure cap of cup-shape having an inner bore portion of smaller diameter and an outer open-end bore portion of larger diameter defining an intermediate internal abutment shoulder therein, said outer bore portion being slidable in abutment with and over and along the outer rim end portion of said other bore wall until said internal abutment shoulder abuts said ring flange of said closure cap.

3. A marking device as defined in claim 2 wherein, said peripheral ring flange is of flexible construction and has a pair of radially-outwardly-projecting and spaced-apart wall portions connected together by a bent-over outer shoulder portion, said spaced-apart wall portions defining an internal locking groove to securely position said marking portion within said retaining cup portion, and said ring flange being flexed inwardly by the internal abutment shoulder of said cap and being slidable along the inner bore thereof to securely position said cap on said retainer cup and over said marking portion.

4. An improved marking device of the character de-

scribed which comprises, a holding body part of substantially cylindrical shape and limited longitudinal extent such that it may readily be carried in the pocket of a purse or clothing being worn, a central abutment wall extending transversely across said body part internally thereof; a pair of bore walls extending longitudinally along said body part in opposite directions from said abutment wall and being open to opposite ends of said body part, one of said bore walls defining a thimble-like finger-tip-receiving compartment portion with said abutment wall, the other of said bore walls defining a marking-unit-carrying and supporting compartment portion with said abutment wall and having an outer rim end portion about its open end; a self-contained marking unit having a retaining cup portion and an endwise-projecting marking portion mounted within said cup portion to project longitudinally-outwardly therefrom; a peripheral ring flange about said cup portion at its open end; said cup portion being slidable in abutment with and internally along said other bore wall until said ring flange abuts the outer rim end portion of said other bore wall to removably mount said marking unit within the supporting compartment portion of said holding body; a closure cap of cup-shape having an inner bore portion of smaller diameter and an outer open-end bore portion of larger diameter defining an intermediate internal abutment shoulder therein, said outer bore portion being slidable in abutment with and over and along the outer rim end portion of said other bore wall until said internal abutment shoulder abuts said ring flange of said closure cap.

5. An improved self-contained marking unit of the character shown and described which comprises, a marking cup having an open-end bore portion therein, a flexible U-shaped ring flange about said marking cup at its open end; said ring flange having a transversely-outwardly-projecting leg portion integrally connected to said

marking cup, a second transversely-inwardly-projecting leg portion in a substantially parallel and spaced relationship with said first-mentioned leg portion, and an outer base portion integrally-flexibly connecting said leg portions with each other; a marking pad positioned within the bore portion of said marking cup and projecting outwardly from its open end, said leg and base portions of said ring flange defining an internal locking groove to securely position said pad within said marking cup; a closure cap of cup-shape having an inner-smaller bore portion and an outer-larger and open end bore portion defining an intermediate abutment shoulder, said abutment shoulder having a maximum outer diameter of the same dimension as said inner bore portion; said outer base portion of said marking cup having a smaller diameter than said outer larger bore portion of said closure cap to freely slide therein into abutment with said abutment shoulder, said base portion of said marking cup having an outer diameter only slightly larger than the diameter of said inner-smaller bore portion of said closure cap to flex transversely-inwardly upon said abutment shoulder and move within and along said inner-smaller bore portion of said closure cap and securely position said cap over the open end of said marking cup and over said marking pad to close off said pad.

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