No. 726,086. PATENTED APR. 21, 1903.

G. A. McALPINE.

MARKING IMPLEMENT.

APPLICATION FILED NOV. 21, 1902.

NO MODEL.

Fig. 1.

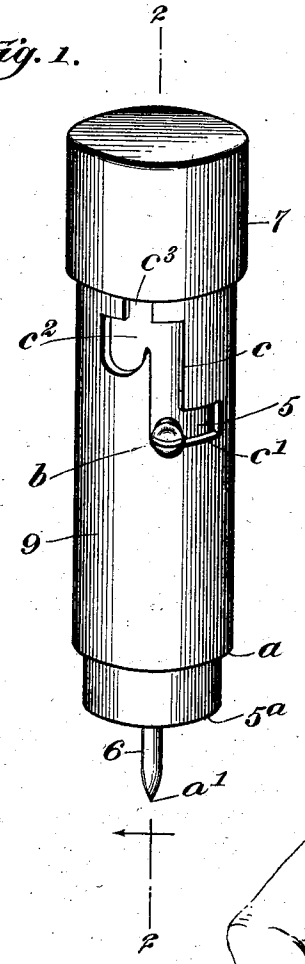


Fig. 2.

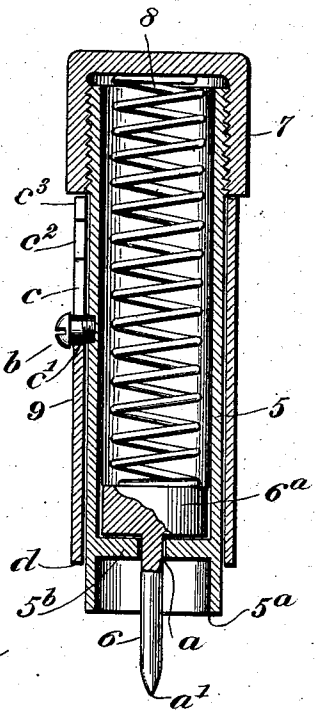
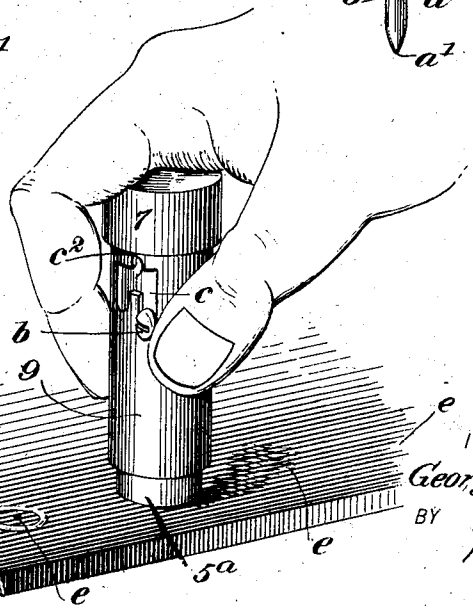


Fig. 3



WITNESSES:

Paul Hunter

Wm. L. Patton

INVENTOR

George A. McAlpine

BY

Munn & Co

ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE A. McALPINE, OF NEWPORT NEWS, VIRGINIA.

MARKING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 726,086, dated April 21, 1903.

Application filed November 21, 1902. Serial No. 132,259. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. McALPINE, a citizen of the United States, and a resident of Newport News, in the county of Warwick and State of Virginia, have invented a new and Improved Marking Implement, of which the following is a full, clear, and exact description.

The object of this invention is to provide a novel marking implement for defining circles on plate metal to indicate where perforations are to be made in the same, and thus enable the metal sheet to be accurately punched to receive rivets or for other purposes.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and defined in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the implement. Fig. 2 is a longitudinal sectional view substantially on the line 2 2 in Fig. 1, and Fig. 3 is a perspective view showing the implement in service.

The invention, in brief, consists of a cylindrical case in which the head portion of a centering-stem is held to slide, said stem that is centered in the case being normally pushed out of the end of said case, which is used as a ring-marker by a spring held in the case and pressing upon the head of the stem.

The invention further embodies a plurality of telescopic cylindrical shells that slide upon the case and may be individually used as circle-markers, means being provided for holding the shell or shells retracted, and thus prevent them from obstructing any one thereof which may be arranged for use.

In the drawings, 5 indicates the cylindrical case forming the hollow body of the marking implement and which in diameter represents one of the sizes of holes the area of which the marking-tool is to define. The extremity 5^a, that serves as a printing-type, is rendered true on its edge, and the latter is at right angles with the longitudinal axis of the case. At a suitable distance from the printing end 5^a a partition 5^b is formed or secured in the case 5 and is centrally perforated, as at *a* in Fig. 2. The stem 6 is cylindrical, of a suitable length and such thickness as adapts it to slide freely in the perforation *a* without being too loose, and the outer end of the stem is pointed, as at *a'*. Upon the end of the stem that extends within the case 5 a cylindrical head-block 6^a is formed or secured, having a diameter which permits said head-block to slide in the case 5 without objectionable looseness, so that the stem and the head-block may receive longitudinal movement and the stem preserve its alinement with the axis of the case at any point of sliding movement given to the stem, or, in other words, the head-block 6^a easily fits the parallel walls of the cylinder 5, whereby said walls form a guide for the inner end or head of the stem 6.

A cap-piece 7 is internally threaded and screwed upon the externally-threaded end of the case 5 farthest from the partition 5^b, and it will be seen that the cap-piece 7 bears upon a spring 8, inserted within the case, and said spring by its stress upon the head-block 6^a causes the centering-stem 6 to project from the case a maximum degree that is defined by the seating of the head-block 6^a upon the partition 5^b.

Upon the exterior of the case 5 a cylindrical shell or sleeve 9 is slidably mounted and is held in a retracted or projected adjustment thereon by a screw or equivalent projection *b*, securably engaged with the side wall of the case 5 and having a loose engagement in a zigzag slot *c*, formed in the sleeve 9. The essentially **Z**-shaped slot *c* is formed at a proper distance from the end of the sleeve 9, which end when not in service as a printing medium is held retracted, this adjustment being effected by turning the sleeve 9 on the case 5 so as to enter the screw-stud *b* into the horizontal lower member *c'* of the **Z**-shaped slot *c*, as indicated in Fig. 3, which adjustment will permit the use of the printing end 5^a of the case 5.

In use the centers *e* of perforations to be formed in a metal plate are indicated tangibly by marks produced with a center-punch and hammer, as represented in Fig. 3. The printing end of the case 5 is thinly coated with white lead or any other thick paint that

will show clearly on the metal sheet if impressed thereon. The workman now grasps the marking implement and inserts the point of the stem 6 into one of the series of spaced center-punch indents *e* and then presses squarely down upon the cap-piece 7 of the marking-tool, this operation being clearly shown in Fig. 3. As represented at *g*, the impinge of the marking end of the case 5 will print a clearly-defined circle upon the metal plate A, and obviously this operation may be repeated indefinitely if the coating on the printing end of the case is removed when necessary. The sleeve 9 is so proportioned that its outer diameter will represent the diameter of a perforation next larger than that defined by the circle *g*, and to use the sleeve as a marker the latter is adjusted so that the stud *b* enters the upper horizontal member c^3 of the L-shaped slot *c* and is therein held by a screwed adjustment of the stud. This arrangement of the sleeve 9 will project its printing end *d* over the like end of the case 5, so that the printing end of the sleeve may be employed as a marker if coated with a printing medium, such as white lead, the point of the stem 6 being utilized to define the proper positions of a series of circles, such as *g*, on the metal plate A, that is to be punched to receive rivets or bolts, as the case may be.

From the horizontal member *c'* of the L-shaped slot *c* leads a supplementary slot c^3, whereby the sleeve 9 may be removed from the case 5 when desired without removing the screw-stud *b*.

To illustrate the construction and operation of the device, I have shown the case 5 provided with a supplementary marking-sleeve 9; but it is to be understood that I in practice may employ more sleeves than one as printing mediums, mounting one upon the other. Hence I do not limit the construction and arrangement of parts to the exact number and combination of parts shown, reserving the right to increase the number as may be found advantageous in service.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A marking implement, comprising a cylindrical case having a partition near one end, said partition having a central perforation, a stem pointed at one end and slidable in said perforation and having a head loosely fitted in the case in contact with the walls of the cylinder whereby said walls form a guide for the inner end or head of said stem, and a spring normally pressing the head so as to seat the same on the partition in the case.

2. A marking implement, comprising a cylindrical case, a cap-piece on one end thereof, a centrally-perforated partition in the case near one end, a spring-pressed stem having a point and adapted to slide in the perforation, a sleeve adjustable on the case, and means for securing the sleeve projected beyond the uncapped end thereof, or to retract it so as to expose said end of the case.

3. In a device of the character described, the plurality of cylindrical members one slidable and securable on the other, each member having a printing end which will mark a circle, and a central spring-pressed stem having a pointed end and adapted to define the position for printing circles with the ends of the cylindrical members, by engagement of said point with indents in the material to be marked.

4. A marking implement, comprising a case the end of which constitutes a marking device, a pointed stem reciprocal in the case, yielding means for pressing said stem outwardly beyond the printing end of the case, a telescoping shell adapted to move longitudinally on said stem to bring its lower end above or below the lower end of said stem at the will of the operator, and means for securing said shell in the desired position upon said stem.

5. A marking implement, comprising a case the end of which constitutes a marking device, a pointed stem reciprocal in the case, yielding means for pressing said stem outwardly beyond the printing end of the case, a telescoping shell adapted to move longitudinally on said case to bring its lower end above or below the lower end of said case at the will of the operator, the end of said telescoping shell also constituting a marking device, said shell having a zigzag slot extending throughout a part of its length, a headed screw received into said case with its shank projecting outwardly through said slot, the upper end of said slot being extended through the end of the shell to permit the removal of the shell without removing the screw, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE A. McALPINE.

Witnesses:
E. M. PETERSON,
A. B. TAYLOR.