

No. 642,337.

Patented Jan. 30, 1900.

A. C. KLEY.
PRINTING OR MARKING APPARATUS.

(Application filed Sept. 29, 1899.)

(No Model.)

Fig. 1.

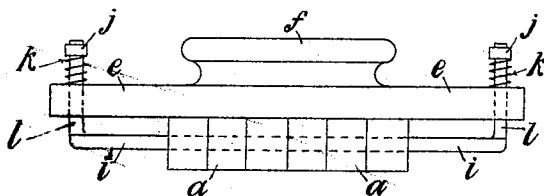


Fig. 2.

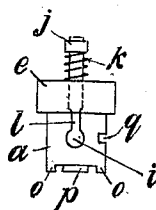
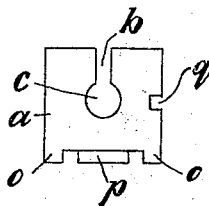


Fig. 3.



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AUGUSTUS CHRISTIAN KLEY, OF LIVERPOOL, ENGLAND.

PRINTING OR MARKING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 642,337, dated January 30, 1900.

Application filed September 29, 1899. Serial No. 732,092. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS CHRISTIAN KLEY, a subject of the Queen of England, and a resident of Liverpool, England, have invented certain new and useful Improvements in Printing or Marking Apparatus, of which the following is a specification.

This invention has reference to apparatus for marking goods, placards, and the like, and more particularly to that type of such apparatus in which the letters to form the words, figures, &c., are held in a suitable frame or carrier and can be conveniently and rapidly changed, so as to produce different words or letters for making different markings or printings; and one of the chief objects and effects of the present invention is to produce or provide an apparatus of this type by which the letters or other type-blocks can be rapidly placed in position or removed, which shall be practically automatically held in place without any hand operating locking or fastening devices, and at the same time shall be firm and true in their setting.

The invention will be described with reference to the accompanying drawings, in which—

Figure 1 is a side elevation of the apparatus. Fig. 2 is an end view, and Fig. 3 an end view of a letter or type-block used therein.

Referring to the drawings, *a* are the type-blocks by which the markings are effected, each of which is provided with a longitudinal opening *b* from the back or one side, extending to an engaging hole *c*, running through it.

e is the carrier or frame, having a handle *f*, by and against which frame the type-blocks *a* are borne, and *i* is a bar of the same size as the hole *c* of the blocks, the ends of which are turned up and passed through the carrier *e* and provided on the ends with a collar or nut *j*, and between this nut and the back of the carrier *e* is a spring *k*.

In the case shown the bar *i*, over which the blocks *a* fit, is round; but one of the turned-up parts which pass through the carrier is cut away at *l*, so as to be slightly smaller than the slots *b* in the blocks *a* and to allow them to slip over.

In use the bar *i* is pulled slightly away from the carrier *e*, and then the type-blocks *a* are slid over the bars *i* one after the other, and

when they are in position the springs *k* force the bar *i* toward the carrier, and thereby press the back of the blocks tightly up against the flat base of the carrier, and so hold it in position, requiring no other fixing means. To change the blocks, of course they are slipped off in the same way as they are slipped on. This holding-bar *i* may be of different shapes—such as circular, triangular, or other suitable form—while the holes through the blocks will be of equivalent or corresponding form to give the “draw” toward the carrier-face. The bar may be in a single length, with the ends turned at right angles and passing through the carrier and drawn up to it by springs on the back, or it may be of any length or in any way suitably arranged, in all cases being formed at the end—*i. e.*, thinned down to allow the blocks to slide and pass over it. Also the apparatus may be arranged as a single-line-printing apparatus or multiple line, and the blocks and carrier constructed and modified in various different ways to suit different purposes for which it may be required, and it may have a single central handle or double handles arranged longitudinally or crosswise.

It is made of wood or any other suitable material.

The blocks *a* on their lower face are provided with projecting parts or ledges *o*, between which the letters or signs used as the type (marked *p*) are placed. These ledges *o* protect the blocks *p* and prevent them being knocked off or injured.

In some cases the blocks *a* may have a groove *q* in the side to indicate the proper position they are to take in the frame and to facilitate the rapid fixing of the blocks in place.

What is claimed in respect of the herein-described invention is—

1. The herein-described improved printing or marking apparatus, consisting of a frame having a type-holding bar retained by springs, and adapted to engage with type-blocks, and to hold them on the frame; the said bar pressing one face of the blocks against the frame substantially as described.

2. In a printing or marking apparatus, a frame or carrier *e*; the type-holding bar *i* retained and pressed toward the carrier by the

springs *k*; and blocks *a* adapted to fit and slide over the said bar, and to be held thereby on the face of the carrier; substantially as set forth.

5 3. In combination, the frame, the bar extending parallel with the face thereof and having bent-up thinned end portions, and the type-blocks having notches adapted to pass over the thinned end portions of the bar, sub-
10 stantially as described.

4. In combination, the frame, the bar ex-

tending parallel with the face thereof, and having its ends bent and extending through the frame, the springs on said bent ends for pressing the bar toward the frame and the 15 type-blocks having notches engaging the bar.

In witness whereof I have hereunto set my hand in presence of two witnesses.

AUGUSTUS CHRISTIAN KLEY.

Witnesses:

JOHN HINDLEY WALKER,
JOHN WILLIAM BROWN.