

UNITED STATES PATENT OFFICE.

HORACE DUMARS, OF GLENRIDGE, NEW JERSEY.

PENCIL-MARKING MACHINE.

No. 927,509.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HORACE DUMARS, a citizen of the United States, residing in Glenridge, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Pencil-Marking Machines, of which the following is a specification.

This invention relates to machines for marking lead pencils or the like, and aims to provide certain improvements therein. Machines of this type are adapted for printing the name of the maker or user, the grade or quality, etc. upon the side of the pencil near its upper end.

The device provided by my invention is especially designed for use where small lots of pencils are to be printed with different names, etc. the principal object being to provide a machine in which the necessary changes in type can be quickly and conveniently made. To this end I provide a machine which in its preferred form comprises a printing or marking means in combination with a suitable device or devices for providing a relative movement of the pencil and marking means while simultaneously rotating the pencil. Preferably I provide two parts which are relatively movable, the one adapted to carry the marking means and the other adapted to roll the pencil across such means.

My invention also includes certain other features of improvement which will be hereinafter more fully described.

Referring to the drawings which illustrate one embodiment of my invention,—Figure 1 is a plan of the machine. Fig. 2 is a vertical section taken on the line 2—2 in Fig. 1. Fig. 3 is a vertical longitudinal section of the form of bearer which I prefer to employ. Fig. 4 is a side elevation of Fig. 3. Fig. 5 is an enlarged vertical cross-section of the upper part of the device taken on the line 5—5 in Fig. 1. Fig. 6 is a plan of a form of adjusting plate.

Referring to the drawings, let A indicate a suitable bed-plate, which may be mounted upon a table or the like, or which may be provided with legs *a* as shown in Fig. 2. On the bed A is mounted a slide B, which is designed to run in guides *b b* attached to or formed as a part of the bed A. Guide-

plates *c c* are preferably provided, such plates being bolted to the guides *b* and serving to hold the slide B in place. The slide is provided on its under face with a plate member C having a bearing surface *d*, which is designed to roll the pencil D over the face of the marking means E while at the same time rolling itself over the pencil. The marking means may consist of ordinary type or other devices capable of forming a mark or imprint upon the pencil.

An important feature of my invention is the provision of a bearer or bearers F which are adapted to hold the pencil in its proper position prior to the printing operation, one of such bearers being shown in Figs. 3 and 4. Such bearers may be constructed in various ways, but I prefer the construction shown in these figures, which comprises a bearing block *e* formed with a longitudinal slot *f* within which is pivoted a spring arm *g* normally held in its upper position by a spring *h*. The rear end of the arm is cut away at *i* so as to form a recess between the clip and an opposing shoulder *j* formed upon the bearer. Such recess is designed to receive the pencil and to form a combined gage and support for the latter. Preferably two bearers are employed, although this number may be varied if desired. As shown in the drawings (best seen in Fig. 5) the bearers are arranged one on each side of the type or other marking means E. For convenience the bearers are made separable from the bed A, and are set into the type form *k*, as though they constituted a part of the type. This is done for convenience in changing the position of the bearers, but it is obvious that the latter may be applied directly to the bed if desired.

The type form *k* may be fixed in any way upon the bed, but I have shown it as clamped between lugs *l l* formed upon the bed and a pivoted catch *m* arranged in front of the form.

The slide B may be operated in any suitable manner, but I prefer to employ a single lever *o* pivoted at *p* to lugs *q* depending from the bed A, such lever being provided at its upper end with a circular enlargement *r* fitting in a correspondingly shaped recess in the slide. When the lever *o* is adapted to be operated by foot power, a suitable treadle *t*

will be provided at its lower end. By this construction I obtain a direct and positive forward movement of the slide, without the use of gearing, pulleys, or other similar devices. If desired a spring *u* may be provided for restoring the slide to its rearward position. I prefer to mount the slide somewhat loosely in its guides, and to provide rollers *v v* to take up any lost motion between the parts. Two of such rollers are preferably used upon the front of the machine and above the slide, and two at the rear of the machine and below the slide. One form of such rollers is shown in section at the right in Fig. 5. The roller proper is mounted upon a shaft *w* formed as a part of or carried by a shaft *a'* eccentric to the shaft *w* mounted in a recess formed in a lug *b'* cast upon the top of the guide plate *c*. By rotating the shaft *a'* in its recess the shaft *w* is brought nearer to or farther from the top of the slide *B*, whereby the roller *v* is correspondingly adjusted. An adjusting wheel *e'* is preferably provided, such wheel having a series of recesses adapted to receive a nail or other device, whereby the shaft *a'* is turned. The latter is formed upon its outer side with a bolt *d'* arranged concentrically with the shaft *w*, and such bolt is provided with a nut *e'*, the nut and bolt serving to hold the device in its adjusted positions. Other means of adjustment may be employed.

In order to adapt the machine for pencils of various diameters, I provide a means for vertically adjusting the member *C* to bring its bearing surface *d* nearer to or farther from the printing face of the type. The means I prefer to employ for this purpose consists of a number of plates *f'* (shown in Fig. 6) which are adapted to be placed between the member *C* and the slide, as best seen in Fig. 5, such plates being formed with slots *g' g'* to receive the bolts or other devices *h' h'* which connect the slide with the member *C*. Such plates may be of varying thickness, and as many may be used as may be necessary to provide for the desired adjustment. I adopt this means of adjustment in preference to adjusting screws or similar devices, for the reason that with the latter it is difficult to adjust the entire bearing surface *d* to the same degree. To facilitate the withdrawal of the plates *f'* I provide the member *C* and slide *B* with recesses *j' j'*, and I form the plates *f'* with holes *k'* adapted for engagement with a hook or other device by which the plates may be withdrawn.

In operation the pencil is placed with its ends in the recesses of the bearers *F* (as shown in Fig. 3), and the treadle *t* is operated to move the slide forwardly, the bearing surface *d* engaging the pencil *D*, as shown in Fig. 2, and rolling the same for-

wardly over the type, the pencil depressing the arm *g* and rolling over it along the top surfaces of the bearers until it passes the type and reaches either the forward ends of the arms or the rear end of the bearing surface *d*.

It is essential to the operation of a machine of this character that the pencil be initially held in precisely the correct position, and that it be accurately guided during the printing operation, or otherwise it will be improperly marked. These conditions are attained by the use of my invention, being largely contributed to by the employment of bearers such as *F*, and the accurate means for adjustment herein shown. I do not wish to be limited, however, to the construction illustrated, as many changes may be made therein without departing from the invention.

By the use of my invention the type which it is desired to imprint upon the pencil may be easily and quickly set up and mounted in the machine, thus providing a capacity for quickly printing different lots of pencils which is not found in any machine with which I am familiar. The actual printing operation is quickly performed, and there is little or no liability of spoiling the pencils. For simplicity I prefer that the type shall be inked by hand, but it is also within my invention to provide other means for accomplishing this result.

I claim is my invention:—

1. In a machine for marking pencils or the like the combination of a bed, a marking means, a pair of bearers one on each side of said marking means, said bearers each having an upper surface so adjusted as to support the pencil as it rolls across said marking means, and having spring arms adapted to hold the pencil in its initial position, and a slide having a bearing surface adapted to move the pencil across said marking means.

2. In a machine for marking pencils or the like, the combination of a bed having marking means, and a pair of bearers each comprising a block having a bearing surface at its top so adjusted as to support the pencil when rolled across said marking means, each of said bearers having a recess, and a spring arm mounted within said recess and adapted to project slightly therefrom, said arm being provided with a shoulder adapted to initially hold said pencil.

3. In a machine for marking pencils or the like, a bed, a marking means on said bed, a slide, a member having a bearing surface, mounted on said slide, and means for adjusting said parts comprising a series of thin plates adapted to be interposed in smaller or greater number between such slide and member.

4. In a machine for marking pencils or

the like, a bed, a marking means, a bearing
surface, and means for adjusting such parts
comprising a series of thin plates adapted
to be interposed between one of such parts
5 and its mounting means, such plates having
recesses adapted to engage a tool for remov-
ing the plate.

In witness whereof, I have hereunto signed
my name in the presence of two subscribing
witnesses.

HORACE DUMARS.

Witnesses:

EUGENE V. MYERS,
FRED WHITE.