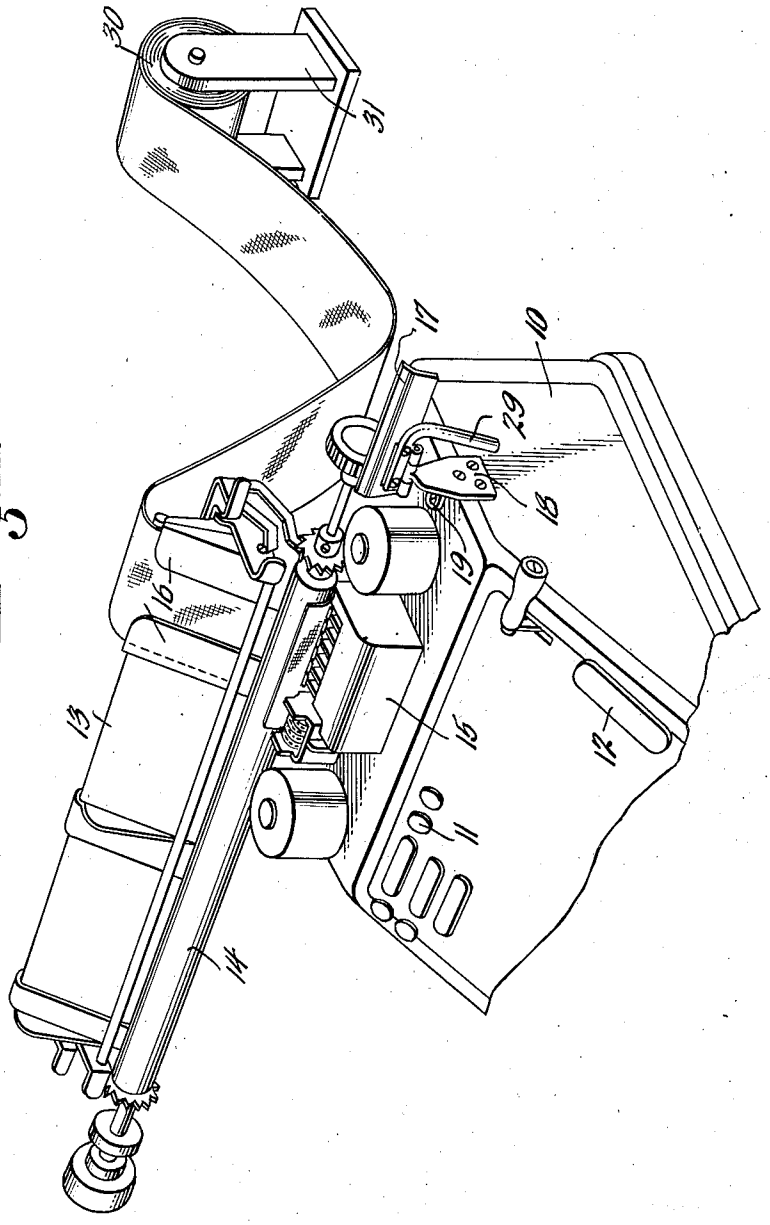
Oct. 7, 1947. O. M. BRADLEY 2,428,510

COMBINED MARKING MACHINE AND CUTTING BLADE

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Fig. 1.



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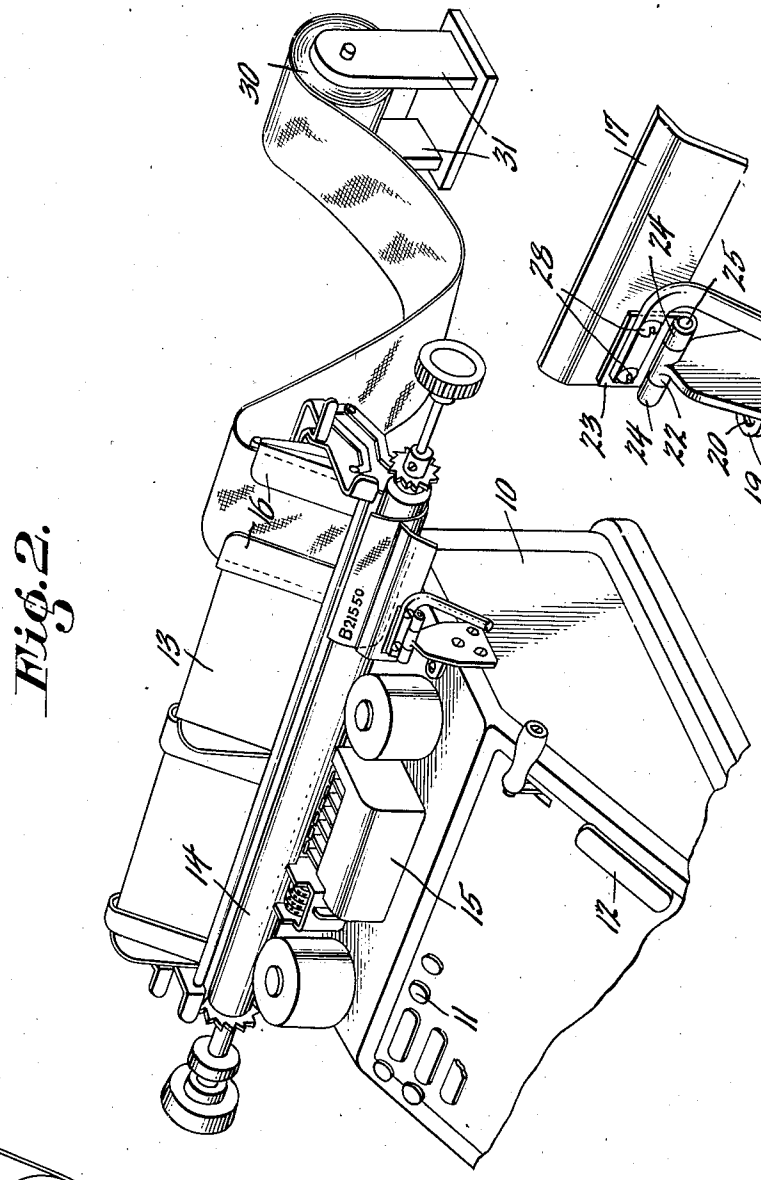


Fig. 2.

Fig. 3.

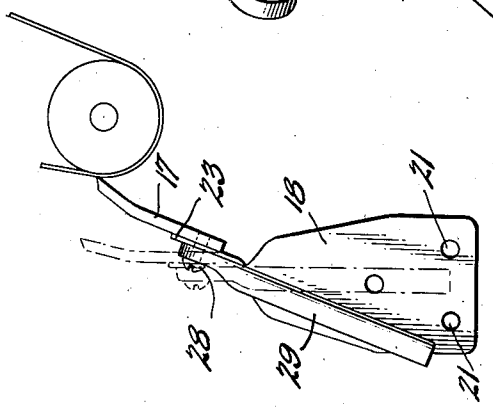


Fig. 4.

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COMBINED MARKING MACHINE AND CUTTING BLADE

Oswell M. Bradley, Richmond, Va.

Application February 11, 1946, Serial No. 646,908

7 Claims. (Cl. 197—133)

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This invention relates to a marking machine and more particularly to a combined marking machine and cutter or tearing blade for use in preparing identification tabs that are to be attached to each of the articles being handled in such establishments as dry cleaning plants, laundries and the like.

In the handling of laundry or garments in cleaning establishments the practice has developed of listing each article to be handled and assigning to such article or to each article of a particular group, a designated number or other identifying data, by printing such data on fabric tapes, after which the tapes are severed and each individual garment or article is identified by securing thereto the severed tape bearing the proper indicia thereon.

This process of marking has been carried out by means of conventional and well known machines such as those put out by the Burroughs Adding Machine Co., in which type of machine a tape is fed to a tabulating carriage and around a roller platen into position to be acted upon by the printing bars.

Heretofore attempts have been made to provide a cutter or tearing blade for such machines by means of which the tapes can be severed into suitable widths for the purpose of attaching the severed portions to the garment. Of course it is desirable to provide these individual tapes in narrow widths so that when attached to the garments they will not be bulky or unsightly.

In the attempts heretofore made to sever the tape a cutter has been mounted directly on the tabulating carriage and is fixed thereto so that it moves with the carriage as it is tabulated.

In such constructions, when mounted on a Burroughs machine of the type employing vertically moving type bars, it has been necessary to so mount the cutter that it is spaced rearwardly from the forward face of the platen in order that the vertically moving type bars would not engage the cutting blade as they moved into printing position.

As the result of this construction it has been found that it is impossible to properly space the numbers along the tape so as to provide for economical use of the tape, and this has resulted, first, in waste of the tape, which is relatively expensive, because it has been found to be necessary to trim the tape by means of shears, scissors or the like, and secondly, such construction entails the loss of considerable time due to the necessity of further trimming the tape after it has been severed by the machine.

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The present invention is designed to overcome the aforesaid difficulties and to result in a satisfactory, economical and rapid means of preparing identification tabs of the proper width, thereby eliminating waste of the tape and any further handling thereof after it has been severed in the machine.

It is an object of this invention, therefore, to provide a cutting or tearing blade in combination with a marking machine, in such a manner that the cutting blade can be operated without interfering with the normal operation of the marking machine.

A further object is to provide a cutting blade which can be mounted on conventional machines without in any way modifying or changing the construction of the machine.

It is a still further object to provide an extremely simple, inexpensive and efficient cutter suitably attached to the frame of the machine and movable into engagement with the tape fed around the platen so that the tape can be cut into strips of narrow width suitable for bearing the necessary identifying indicia and without the necessity for any further manual operations once the tape has been severed by the cutter.

Other objects and advantages will be apparent from the following description, it being understood that I have illustrated here the preferred embodiment of the invention but do not intend to limit the same to details of construction other than those necessitated by the appended claims.

Referring to the drawings:

Figure 1 is a fragmentary, diagrammatic, perspective view of a conventional marking machine with the cutter applied thereto and showing the machine in one of its printing positions.

Fig. 2 is a view similar to Fig. 1 but showing the machine in position for severing the tape.

Fig. 3 is a perspective view of the cutter or tearing blade, and

Fig. 4 is a side view of the cutting blade shown in operative position in full lines to engage the tape and in its normal disengaged position in dotted lines.

In the drawings I have illustrated the present invention as being applied to a standard, conventional power-operated marking machine such as the machines now on the market manufactured by Burroughs Adding Machine Co., and others.

This includes a housing 10 carrying a suitable keyboard 11, operating key 12, tabulating carriage 13, roller platen 14 for feeding the tape therearound, and the casing 15 enclosing the type bars, which in this particular type of machine

consists of a plurality of type bars which are selectively moved vertically into the desired printing position, after which they are forced into printing engagement with the tape or other matter being printed. Since such machines are of well known construction further description thereof is unnecessary, and it is to be understood that the invention is not necessarily limited to application to any particular type of marking machine but is equally applicable to any such machine with which the machine is capable of operation.

In employing marking machines of this character it is customary to feed a slip of paper around the roller platen 14 at one end of the platen, such as the left-hand end shown in Fig. 1, and the tape upon which the identifying data is to be printed is fed around the platen 14 through guides 16 at the other end of the platen, such as the right-hand end shown in Fig. 1.

The carriage 13 is reciprocated manually to bring the left-hand end of the carriage into printing position, after which the article of clothing, laundry or the like that is being handled is listed thereon. If there are several items in any particular bundle being handled for a particular customer, these are all listed, the platen being rotated to suitably space the listing. After all of the garments have been listed the carriage is then moved to bring the identifying tape into printing position, as shown in Fig. 1, after which the keys 11 are operated to select the proper number and the operating key depressed, after which the vertically moving printing members are elevated to suitable position and forced against the tape. Where more than one article is listed and consequently the same number must be applied for each article, the printing operation is repeated so as to apply to each article in the given bundle the same identifying number.

After the tape has been suitably printed the carriage is again manually moved, in the present instance, to the right as seen in Fig. 2, so as to position the tape directly to the rear of the cutting or tearing blade 17.

The cutting blade 17 is attached to the side of the housing 10 by means of a bracket 18 provided with an ear 19 having an opening 20 therein through which passes a screw for securing the ear 19 to the top of the machine. The bracket 18 is provided with a plurality of apertures 21 to receive suitable fastening means to secure the bracket to the side face of the housing 10.

The upper end of the bracket 18 is formed with a tubular member 22 in which the cutter blade 17 is pivoted.

Attached to the rear of the blade 17 is a hinge leaf 23 terminating at spaced loops 24 lying at opposite ends of the tubular portion 22 and in registry therewith to receive the hinge pintle 25.

The blade 17 is secured to the hinge leaf by means of fastening means such as screws 26, and these screws also serve to secure an operating handle 29 to the hinge leaf 23 and blade 17.

As shown, the blade 17 is curved so that the cutting edge thereof firmly engages the tape surrounding the platen 14 and extends longitudinally of the platen a distance equal to the width of the tape.

The operating handle 29 for the blade 17 is of such mass and is attached to the blade 17 in such relation that the major portion of the handle depends below the pintle 25. Consequently, it will be seen that in its normal position the blade 17 occupies a substantially vertical position as shown in dotted lines in Fig. 4, in which position it is spaced from the platen 14 so as to permit the platen carrying the tape to move into position behind the blade.

After the platen has been moved so that the tape is in position to be cut, the operator pulls the handle 29 so as to force the blade 17 into engagement with the tape, after which the tape is drawn across the cutting edge of the blade.

For purposes of illustration, there has been shown a suitable supply of tape consisting of a reel 30 journaled in a suitable support 31, but of course it is to be understood that the source of supply for the tape may be provided in any suitable manner.

From the foregoing it will be seen that I have provided a cutting or tearing blade for marking machines in which the blade is fixed with reference to the longitudinal movement of the tabulating carriage, and is carried by a stationary part of the machine. Consequently, the cutter is removed from any possible conflict with movement of the vertical printing bars to thereby avoid the difficulties heretofore encountered where cutting members have been applied directly to the tabulating carriage.

In operation, the carriage 14 is positioned as shown in Fig. 1 so that the printing members will engage the tape upon operation thereof.

After the printing has been accomplished the carriage is moved to the position shown in Fig. 2, carrying with it the tape, which is permitted, due to the fact that the cutting blade is in its normal position spaced from the platen. The handle 29 is then operated to force the blade 17 into engagement with the tape and the tape is torn along the cutting edge thereof. The platen 14 is then rotated to position the next number above the cutting edge but closely adjacent thereto, after which the next strip is torn from the tape. This operation is repeated so that strips of tape which are relatively small, each bearing suitable identifying data, are provided for subsequent attachment to each article of goods being handled.

In view of the fact that the cutting blade bears no definite fixed relation with reference to the movable carriage, it is apparent that the identifying marks can be spaced closely together and the blade operated to sever the strip immediately above and below the number. Consequently, material saving in tape is accomplished and the necessity for trimming such tape eliminated.

I claim:

1. The combination with a marking machine of the type including a housing and having printing mechanism and a reciprocating platen carriage thereon provided with tape feeding guides for feeding tape around said platen and into position to be printed on by said printing mechanism, of a cutting blade carried by said housing and normally spaced from said platen, said blade being mounted for movement into engagement with said tape when the carriage has been reciprocated from printing position to bring the tape into alignment with said blade.

2. The combination with a marking machine of the type including a housing and having printing mechanism and a reciprocating platen carriage thereon provided with tape feeding guides for feeding tape around said platen and into position to be printed on by said printing mechanism, of a cutting blade pivoted to said housing and normally lying in spaced relation to said platen, said blade being movable into engagement with said tape when the carriage has been reciprocated

from printing position to bring the tape into alignment with said blade.

3. The combination with a marking machine of the type including a housing and having printing mechanism and a reciprocating platen carriage thereon provided with tape feeding guides for feeding tape around said platen and into position to be printed on by said printing mechanism, of a cutting blade carried by said housing and normally spaced from said platen, said blade being mounted for movement into engagement with said tape when the carriage has been reciprocated from printing position to bring the tape into alignment with said blade, and means for moving said blade into engagement with said tape to permit severance thereof.

4. The combination with a marking machine of the type including a housing and having a printing mechanism and a reciprocating platen carriage thereon provided with tape feeding guides for feeding tape around said platen and into position to be printed on by said printing mechanism, of a cutting blade carried by said housing and normally spaced from said platen, said blade being mounted for movement into engagement with said tape when the carriage has been reciprocated from printing position to bring the tape into alignment with said blade, said blade being movable into engagement with said tape to permit severance thereof, and automatically returnable to its spaced position with reference to said platen.

5. The combination with a marking machine of the type including a housing and having printing mechanism and a reciprocating platen carriage thereon provided with tape feeding guides for feeding tape around said platen and into position to be printed on by said printing mechanism, of a cutting blade carried by said housing and normally spaced from said platen, said blade being mounted for movement into engagement with said tape when the carriage has been reciprocated from printing position to bring the tape into alignment with said blade, and means for moving said blade into engagement with said tape to permit severance thereof, said moving

means comprising a weighted handle secured to said blade for movement thereof against said tape, said blade being so pivoted that the weighted handle normally returns the blade to said spaced position.

6. An attachment for a marking machine including a housing and having printing mechanism and a reciprocating platen carriage thereon provided with tape feeding guides for feeding tape around said platen and into position to be printed on by said printing mechanism comprising a cutting blade secured to said housing at one side of the printing members, said blade being pivoted for movement into engagement with the tape when the carriage has been reciprocated to move the tape from printing position to a position in alignment with said blade.

7. An attachment for a marking machine including a housing and having printing mechanism and a reciprocating platen carriage thereon provided with tape feeding guides for feeding tape around said platen and into position to be printed on by said printing mechanism comprising a cutting blade secured to said housing at one side of the printing members, said blade being pivoted for movement into engagement with the tape when the carriage has been reciprocated to move the tape from printing position to a position in alignment with said blade, and means for normally maintaining said blade in spaced relation to said platen, said means comprising a weighted handle depending below said pivot and operable upon release for swinging said blade away from said platen.

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