June 29, 1943. H. J. HOPKINS 2,323,043

MANUFACTURE OF VISIBLE INDEX OR RECORD STRIPS

Original Filed Oct. 27, 1941 2 Sheets-Sheet 1

Fig. 1.

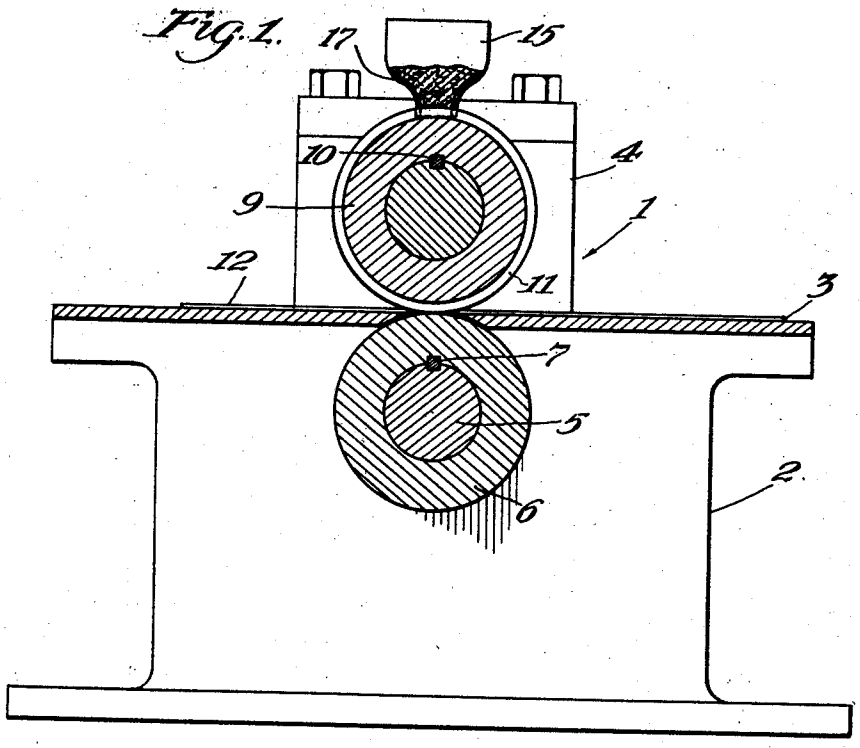
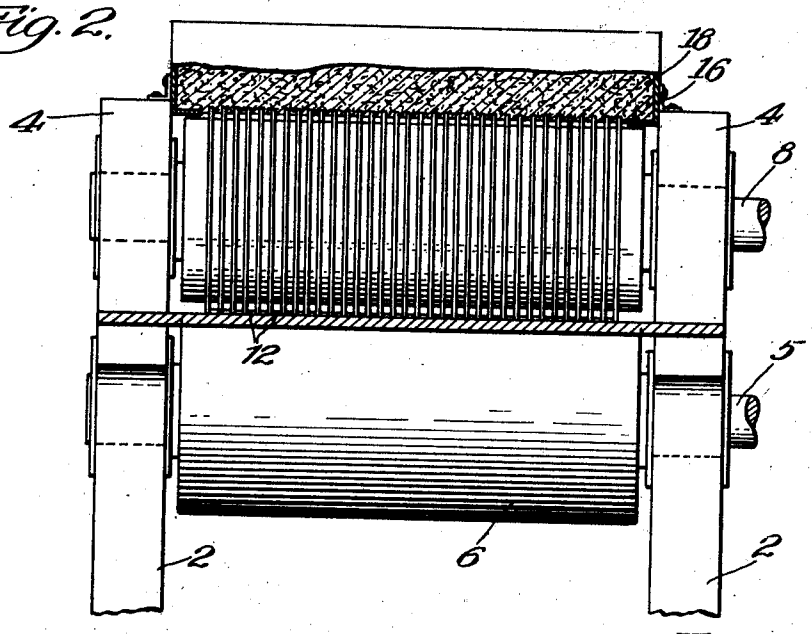


Fig. 2.



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Fig. 3.

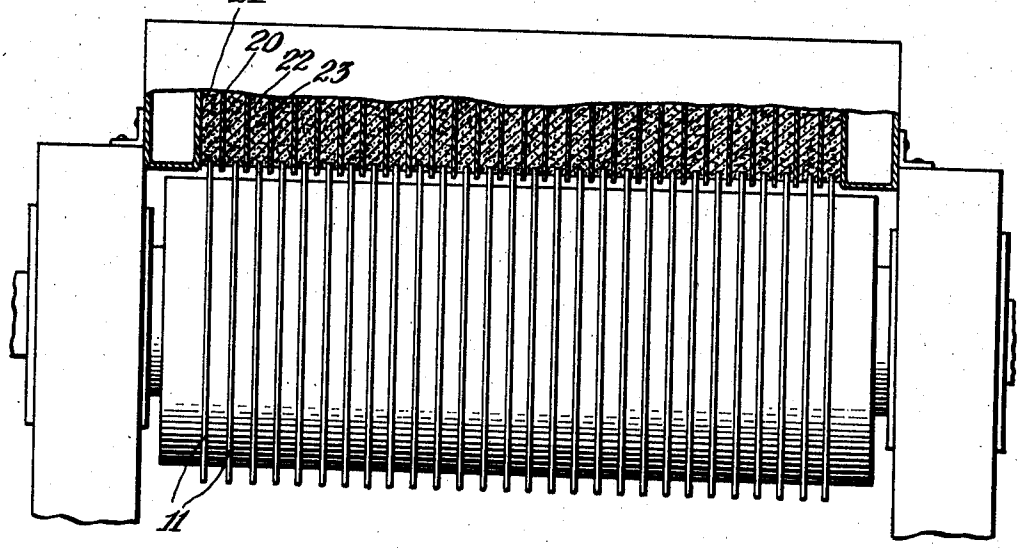


Fig. 4.

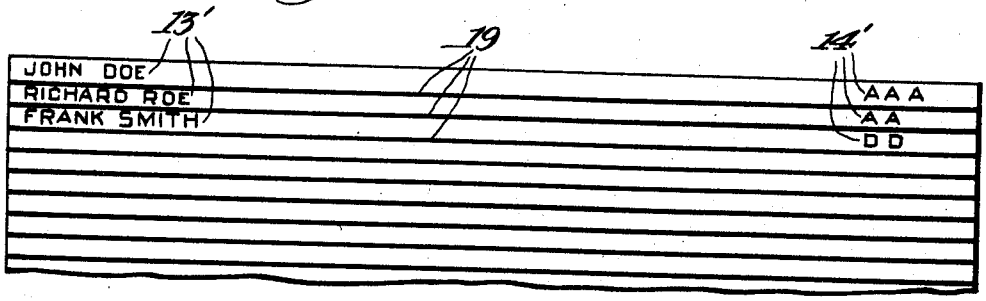
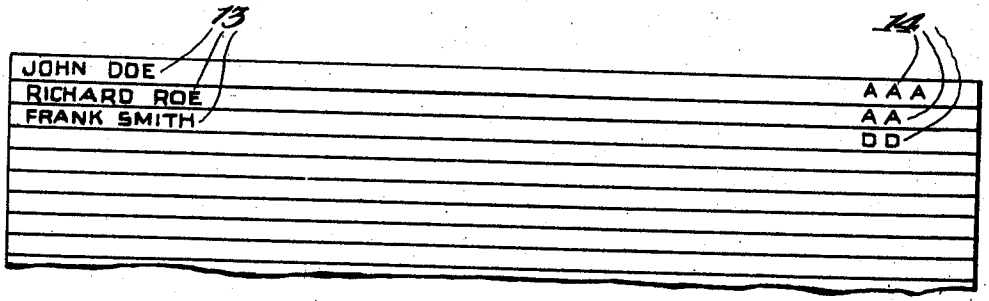


Fig. 5.



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Patented June 29, 1943 2,323,043

UNITED STATES PATENT OFFICE

2,323,043

MANUFACTURE OF VISIBLE INDEX OR RECORD STRIPS

Harry J. Hopkins, Chicago, Ill., assignor to Acme Visible Records, Inc., Chicago, Ill., a corporation of Illinois

Original application October 27, 1941, Serial No. 416,652. Divided and this application July 24, 1942, Serial No. 452,246

1 Claim. (Cl. 117—4)

This application is a division of my copending application Serial No. 416,652, filed October 27, 1941.

This invention relates to improvements in a method for making visible index or record strips provided with lines adjacent or at their longitudinal marginal edges distinctively colored from the faces of the strips, and refers specifically to a method for inscribing such distinctively colored lines simultaneously with the cutting of the strips.

In the use of visible indices or records, such, for example, as described in the issued patent to Frank D. Powell, Patent No. 1,594,112, issued July 27, 1926, difficulty is sometimes encountered in conveniently associating indicia which appears adjacent one end of a strip with the correlated indicia which appears adjacent the opposite end of the strip. When in use, the strips are positioned close to each other upon a suitable frame, such as described in the Powell patent hereinbefore identified, and in view of this fact the lines of demarcation between adjacent strips are not striking and, without the use of an assisting straight-edge, the eye of the operator has difficulty in traversing the length of a predetermined strip to associate indicia adjacent one end of the strip with the correlated indicia adjacent the opposite end.

As a result, errors are likely to occur by the inadvertent raising or lowering of the operator's eye, and the indicia at one end of a predetermined strip may be improperly associated with indicia at the opposite ends of adjacent strips.

My present invention contemplates the provision of index strips of the class described having lines at or adjacent the longitudinal marginal edges of each strip of a color distinct from the color of the face of the strip whereby a guide is provided for the eye of the operator in scanning the length of a strip, and this application is directed to a convenient method for inscribing such guide lines simultaneously with the cutting of the strips.

Other objects and advantages of my invention will be apparent from the accompanying drawings and following detailed description.

In the drawings,

Fig. 1 is a transverse sectional view of a suitable machine for carrying out my invention.

Fig. 2 is an elevational view, parts being broken away and parts being shown in section, of the machine illustrated in Fig. 1.

Fig. 3 is a fragmentary view similar to that shown in Fig. 2 of a modification of the machine.

Fig. 4 is a face view of a plurality of strips having marginal lines in accordance with my invention.

Fig. 5 is a similar view of the strips shown in Fig. 4 without such marginal guide lines.

Referring in detail to the drawings, 1 indicates a machine for cutting strips such as those described in the Powell patent hereinbefore identified. The machine 1 comprises a pair of spaced frames 2—2 which carry a platform 3 at their upper edges. A structure comprising spaced frame members 4—4 is mounted upon the platform 3. A shaft 5 is journalled adjacent its opposite ends in the frame members 2, said shaft carrying intermediate the frame members a bed roll 6 which is keyed to the shaft as indicated at 7 in Fig. 1. A shaft 8 is journalled in the opposite frame members 4 and carries a roll 9 which is keyed to the shaft 8 by means of key 10.

The machine 1 is described only with regard to its essentials. A machine for cutting the indexed strips hereinbefore described is fully set forth in the patent to Frank D. Powell Patent No. 1,804,642 issued May 12, 1931.

Of course it is to be understood that the machine described in Powell Patent No. 1,804,642 may be employed or any suitable strip cutting machine can be utilized in carrying out my present invention.

The roll 9 carries a plurality of axially spaced, circumferential knives 11, and in employing the machine to cut index strips, the periphery of the bed roll 6 is preferably disposed substantially flush with the platform 3. In cutting the strips, a sheet 12 from which the strips may be cut is passed between the rolls 6 and 9, and the knives 11 function to properly cut the sheet into strips of appropriate width.

As fully described in the Powell Patent No. 1,594,112, the visible index strips are formed from a sheet of relatively thin wood veneer. A sheet of paper is adhesively united to each face of the wood veneer sheet and in passing the sheet, indicated as sheet 12, between rolls 6 and 9, the rolls are so adjusted with respect to each other that the knives 11 cut the upper paper sheet and also the sheet of wood veneer but leave the lower paper sheet intact whereby the sheet of strips may be inserted in a typewriter, for instance, in sheet form, and indicia such as shown at 13 and 14 in Fig. 5 may be inscribed upon the faces of the individual strips. Subsequently, the strips are separated and inserted in the manner

described in Powell Patent No. 1,594,112 in a suitable frame.

Fig. 5 indicates the position of a plurality of such strips when held by a frame (not shown). It will be noted that the longitudinal edges of adjacent strips are disposed very close to each other and that a comparatively faint line of demarcation exists between the strips. An operator attempting to utilize such a visible index system may, for example, wish to ascertain the credit rating of "Richard Roe." The eye of the operator in traversing the length of the strip dedicated to "Richard Roe," may raise or lower during the operation and may inadvertently associate the rating "AAA" belonging to "John Doe," with "Richard Roe," or there is the danger of the operator's eye lowering to the strip dedicated to "Frank Smith" and ascribing the rating "DD" to "Richard Roe." It can readily be appreciated that when a large number of these indicia are presented to the eye of the operator, such errors are very likely to occur.

This possibility of error is attributable primarily to the fact that heretofore no striking line of demarcation has been provided between adjacent strips since the strips are usually all of the same base color and the cutting operation tends to form a fillet along the longitudinal edges of the face of the individual strips, which fillet partakes of the color of the face sheet.

In accordance with my invention, I provide a trough **15** which may be mounted by suitable brackets **16** upon the upper edges of the supporting members **4**. The trough **15** is adapted to contain wicking **17**, or other absorbent material and the lower portion of the trough may be open as indicated at **18** in Fig. 2. The trough **15** is so positioned with respect to the roll **9** that the knives **11** are wiped by the wicking material **17**. A quantity of ink or other coloring liquid is deposited in the trough **15** and saturates the wicking **17** whereby a film of coloring material is carried upon the lateral surfaces of the knives **11**. In cutting the upper paper sheet and the veneer comprising the sheet **12**, the films of coloring material carried upon the knives **11** are transferred to the upper edges of the scored strips. In this manner the dual operation is performed of cutting the strips and simultaneously coloring those portions of the strips adjacent their longitudinal edges.

A plurality of such strips, after the sheet **12** has been properly inscribed and the strips broken, appears in a frame (not shown) as indicated in Fig. 4. It will be noted that in correlating the indicia **13'** with the respective indicia **14'**, the eye is assisted by the colored lines of demarcation **19** and the possibility of error is accordingly reduced.

If desired the trough **15** may carry a plurality of partitions **20** as shown in Fig. 3 and absorbent material such as cotton wicking **21**, **22** and **23** may be inserted in the spaces provided between adjacent partitions **20**. It will be noted that the knives **11** are each brought into contact with a separate mass of wicking. For instance, the first knife **11** may be wiped by the wicking **21**, the second knife by the wicking **22**, and the third knife by the wicking **23** and so on throughout the length of the roll.

If desired, the wicking contained in each of the separate compartments may be impregnated or saturated with a distinctive coloring material. For instance, the wicking **21** may be saturated with a red pigment; the wicking **22** with a blue pigment. The wicking **23** may be pigmented red and alternate wickings may be red and blue. Obviously by the provision of separate compartments for the wicking which wipe the individual knives, any desired arrangement colors can be obtained and, hence, these distinctive colors may be transferred to the longitudinal edges of the strips.

It is to be understood, of course, that the strips may be cut by devices which operate differently from that shown and described. My invention broadly contemplates, however, the idea of wiping cutting knives for the strips with a coloring material so that a film thereof may be imparted to the longitudinal edges of the strips during the cutting operation.

While I have described and illustrated the concept of my invention as applied specifically to the index strip shown in Patent No. 1,594,112, it is to be understood that my invention in its broad aspects includes all of the conventional index strips now in general use. It is not intended that the invention is limited in any way to the type of index strips shown in said Patent No. 1,594,112. For example, in one index strip structure now in general use the strips are made of wood veneer faced with paper united to a backing sheet from which the separated strips are peeled or stripped. In another structure in commercial use the strips comprise a core of relatively inexpensive fiber such as ship board faced with a print-receiving surface. These strips are completely severad and are united by means of two parallel adhesive tapes disposed at right angles to the length of the index strips.

I claim as my invention:

A method of making flexible visible index strips which comprises cutting a sheet of strip material into individual strips, depositing a film of marking material upon the cutting blades, and transferring said film from said blades to portions of said strips adjacent the lines of severance during the cutting of the strips.

HARRY J. HOPKINS.