

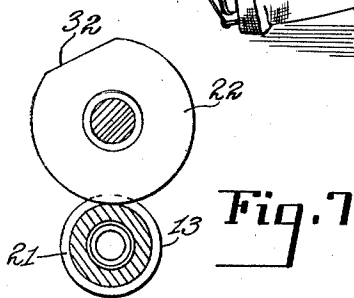
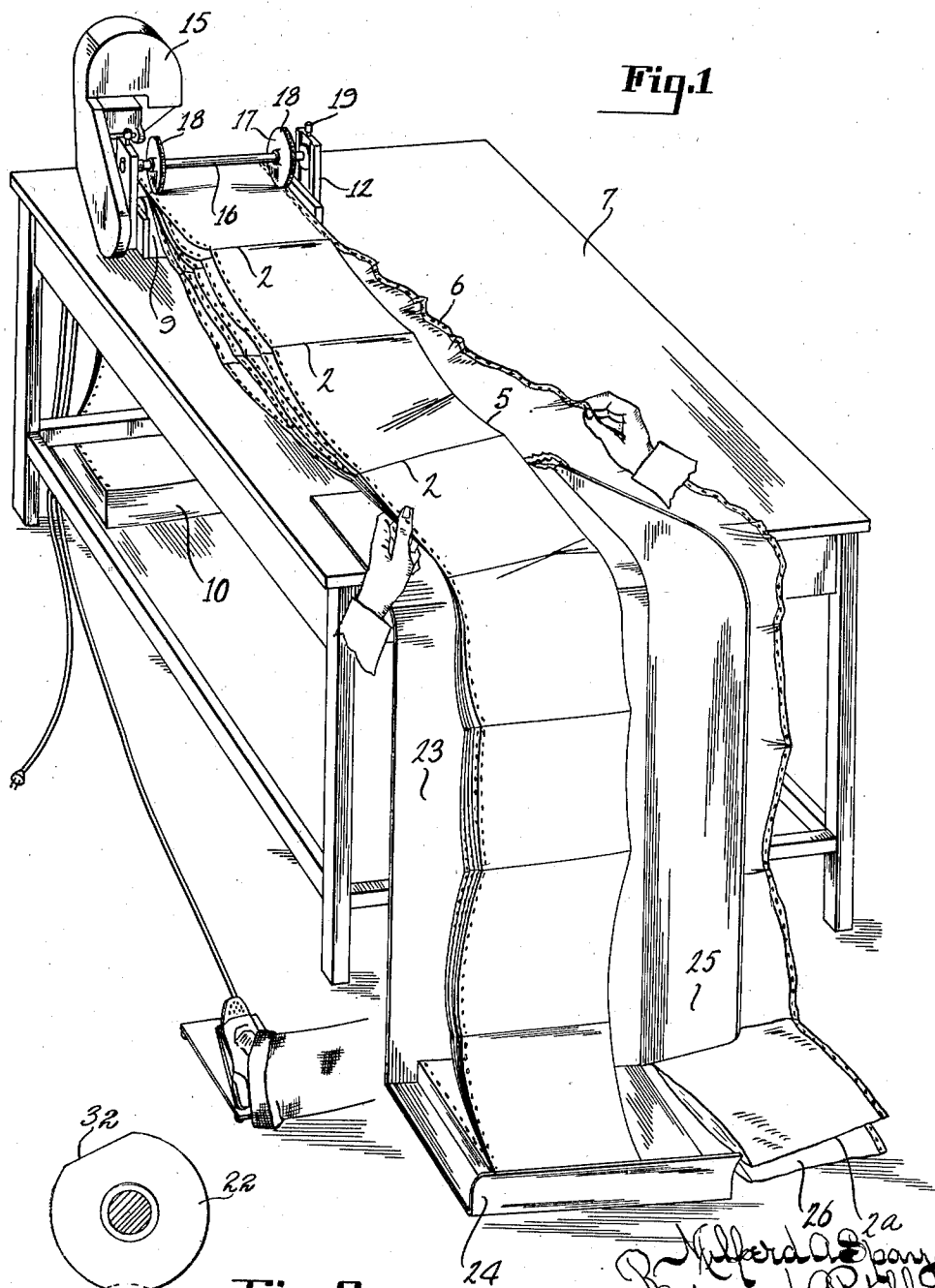
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M. A. SPAYD ET AL
STRIP BREAKING MACHINE

2,237,320

Filed Jan. 9, 1939

4 Sheets-Sheet 1



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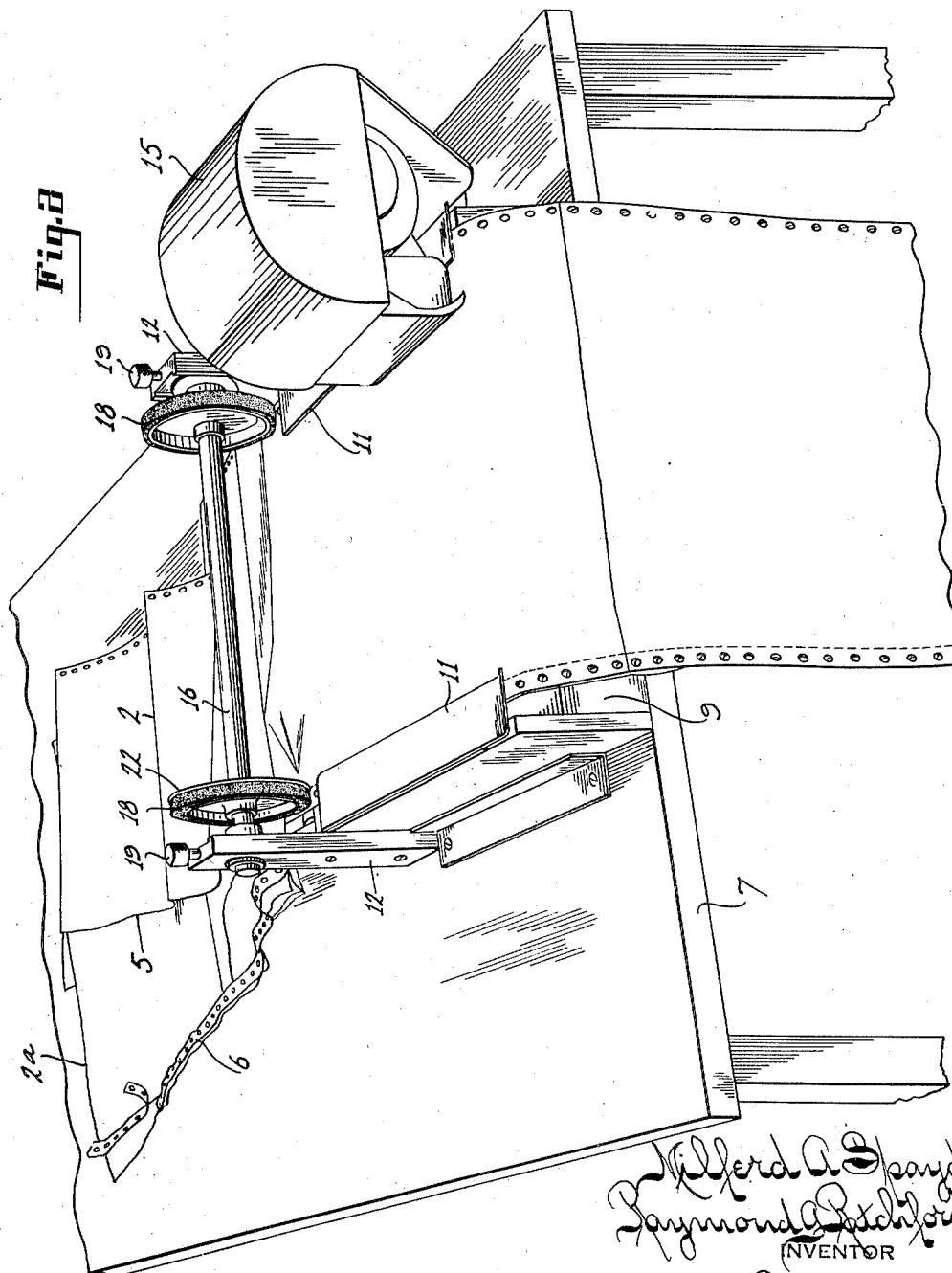
M. A. SPAYD ET AL

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4 Sheets-Sheet 2



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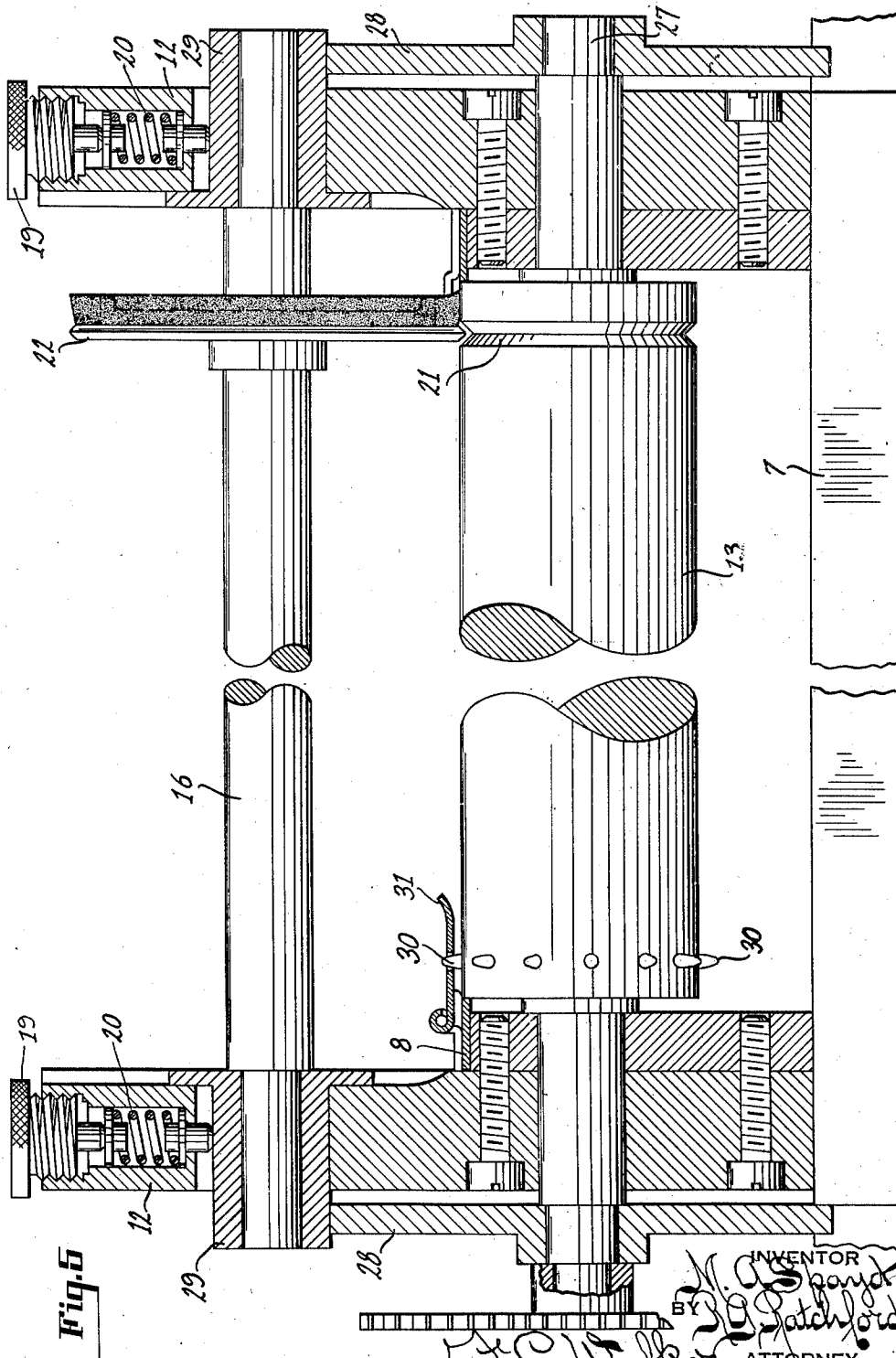
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4 Sheets-Sheet 4



UNITED STATES PATENT OFFICE

2,237,320

STRIP BREAKING MACHINE

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26 Claims. (Cl. 164—84.5)

This invention pertains to an apparatus for breaking scored lines of manifolding assemblies preparatory to separating interleaved carbon or transfer material from therebetween.

In the manufacture of continuous form stationery wherein superposed record strips are assembled with strips of transfer or carbon material interleaved therebetween, it is more or less common practice to affix the several strips one to another along at least one margin by either pasting or stapling, or otherwise. The record strips, but not the interleaved transfer material, are scored or weakened on lines parallel with and closely adjacent to such interconnected margins. Subsequently to inscription, the assembly of record and transfer materials is divided on longitudinally spaced transverse weakened lines into sets of corresponding records and interleaved transfer sheets held together by their marginal attachment. Thereafter, the record material is severed on longitudinally weakened lines, leaving the detached marginal stub portions united with the transfer material, which may be withdrawn from between the inscribed record material as a "book" while the record sheets are left free of each other.

It is also more or less common practice to provide longitudinally spaced marginal feed holes in the manifolding assemblies, in either or both margins thereof. After the punched margins have served their purpose, it is sometimes desirable to remove the marginal punched portions on adjacent longitudinal weakened division lines. The spaced feed holes in one margin occur substantially coincident with the area of attachment of the record and transfer materials with each other and are removed with the separation of the interleaved transfer material from the inscribed record material. The opposite punched margin may also be removed by an operation similar to that herein described.

In those instances wherein large numbers of successive manifolded forms are inscribed without separating the successive sets of forms one from another, it is desirable to break the longitudinal weakened lines whereby the inscribed records are freed from the transfer material preparatory to subsequent separation of the strips into individual forms.

To mechanically effect such breakage or separation of the record strips on longitudinal lines, thereby facilitating separation of the record and transfer material, is the primary purpose of the present apparatus.

An object of the invention is to provide such

strip dividing device which may not only be economically manufactured and operated but which will be efficient in use, automatic in operation, uniform in action, of relatively few parts and unlikely to get out of repair.

A further object of the invention is to provide means for rapidly breaking continuous strips along predetermined weakened lines.

A further object of the invention is to enable rapid separation of interleaved transfer strips from between superposed record strips.

A further object of the invention is to provide means for breaking or dividing the record strips intermittently throughout their longitudinal weakened division lines, leaving sufficient attachment of the sheets of each set of forms to hold them temporarily in assembled relation after the assembly has been transversely divided into a succession of sets of sheets.

A further object of the invention is to provide a strip breaking or dividing apparatus embodying the advantageous structural features and possessing the inherent meritorious characteristics herein mentioned.

With the above primary and other incidental objects in view as will more fully appear in the specification, the invention intended to be protected by Letters Patent consists of the features of construction, the parts and combinations thereof, and the mode of operation, or their equivalents, as hereinafter described or illustrated in the accompanying drawings.

In the drawings wherein is shown the preferred but obviously not necessarily the only form of embodiment of the invention,

Fig. 1 is a perspective view of the apparatus as observed from the out-put or discharge side.

Fig. 2 is a similar view from the supply or in-feeding side.

Fig. 3 is a front elevation from the same side as Fig. 1.

Fig. 4 is a longitudinal sectional view.

Fig. 5 is a sectional elevation of a modification.

Fig. 6 is a perspective view of a packet of alternating record and transfer material and a terminal set of forms divided therefrom and partially separated from the interleaved transfer material.

Fig. 7 is a view, partly in section and partly in elevation, showing a modified form of breaker device.

Like parts are indicated by similar characters of reference throughout the several views.

The assembly of superposed strips of record material and interleaved strips of transfer mate-

rial to be operated upon is shown in Fig. 6, wherein 1—1 are plural strips of series connected printed forms detachable into succeeding sheets on transverse registering weakened division lines 2—2. Interleaved between the record strips are continuous strips of transfer material 3—3 also divisible into succeeding sheets on longitudinally spaced transverse weakened division lines 2a, disposed in registry with the like division lines 2 of the record strips. The assembly of superposed record strips and interleaved transfer strips are fixedly interconnected along one margin by staples 4 or by either continuous glue stripes or by glue spotting whereby the several strips are united into an integral assembly.

Contiguous to the attached margins of the strips and parallel therewith, the record strips, but not the interleaved transfer strips, are provided with longitudinal weakened lines 5 upon which the strips are divisible, leaving the narrow marginal portions 6 thereof attached to the transfer material. Either before or after rupture on the weakened lines 5, the assembly may be divided into separate sets of forms or record sheets and interleaved transfer sheets detached from the supply strips on the transverse division lines 2 and 2a as shown at the right in Fig. 6. The record sheets of such sets upon division on the longitudinal lines 5 leave the marginal stubs 6 attached to the transfer sheets, which remain interconnected in book form, for unison withdrawal from between the detached record sheets.

The present apparatus is for the purpose of progressively dividing the continuous record strips either entirely or partially on their longitudinal weakened lines 5 before their division on the transverse weakened lines 2 into individual sheets. The interleaved transfer strips may be separated from the detached record strips during the operation, or the detached record strips and interleaved transfer material may be refolded into their original zig-zag form for subsequent separation. In the latter event the record strips may not necessarily be divided completely on the longitudinal lines 5, but such division may be intermittent, leaving at spaced intervals relatively short unbroken intervals. These are preferably disposed, at least one in each form length, so that after division transversely on the lines 2—2a into sets the sheets may be held together temporarily by such relatively short remaining portion, which may be easily broken by slight strain to subsequently release the record sheets.

Referring to the accompanying drawings, the strip breaking apparatus is shown mounted on a table 7 on which is an elevated base or paper guide 8 having a rounded end 9 adjacent to one edge of the table over which the manifolding assembly is progressively drawn from a supply packet 10 preferably at a lower level. At opposite sides of the strip guide 8 are supplemental flanges 11 overlying the margins of the manifolding assembly and restraining the passing strips thereof flatly on the guide base 8. Journaled in uprights 12 at opposite sides of the paper guide base 8 is a roller 13 disposed in tangential relation with the top of the paper guide 8. The roller 13 is actuated by a chain drive belt 14 from a driving motor 15 supported in elevated relation above the guide base 8. Journaled also in the uprights 12 is a shaft 16 carrying spaced wheels or discs 17 having relatively soft tenacious rubber rims or tires 18. The peripheries of the discs 17 are outwardly beveled and cooperate with the roller 13 to forcibly grip the margins

of the manifolding assembly therebetween under sufficient pressure to insure continuous feeding movement and to transversely resist inward retraction of the marginal portions thereof. The pressure of the discs 17 upon the roller 13 and interposed manifolding material is regulated by adjustment screws 19 acting upon pressure springs 20, which in turn react upon the adjustable bearings of the shaft 16, as illustrated in Fig. 5. The tapered periphery of the discs 17 act on the margins of the manifolding assembly in opposition to each other, each tending to deflect the material laterally in opposite directions and thereby maintain the material stretched transversely in relatively tight condition, and exert a progressive clamping action upon the margins of the assembly, in cooperation with the roller 13, by which inward retraction of the margins is forcibly resisted.

The roller 13 is provided with a peripheral groove 21 substantially coincident with the position of the longitudinal registering weakened division lines 5 of the superposed record strips. Carried by the shaft 16 closely adjacent to one of the friction discs 17, coincident with the longitudinal division lines 5 of the strips and in registry with the peripheral groove 21 of the roller 13, is a pressure disc 22 of such size as to extend slightly beyond the face of the roller 13 into the groove 21. The manifolding assembly is bridged across the groove 21 under transverse tension and its margins clamped against retractive influence by the disc rims 18 as it is progressively advanced in unison with rotation of the roller 13 and discs 17. The disc 22 by its deflection of the tensioned strip into the groove 22 imposes bursting strain on the weakened record strips, which yield along the weakened lines 5. The unweakened transfer material, however, resists such breaking strain.

If the interleaved transfer material is to be progressively separated from the detached record strips, such interconnected transfer material and attached marginal stub portions of the record strips are directed beyond the breaking apparatus into a path divergent to that of the detached record strips, as shown particularly in Fig. 1. In such arrangement the detached record strips, from which the interleaved transfer strips have been removed, pass over the edge of the table and over a suitable guide 23 to a receiving tray 24 in which they are refolded in zig-zag formation. In unison therewith the transfer strips, which remain interconnected with each other and carry the detached margins of the record strips, pass divergently over the edge of the table beyond a guide partition 25 and are also refolded in zig-zag formation into a separate packet 26.

In the event that the record strips and transfer material are not to be separated, they are permitted to progress through the same path of travel and are refolded into a single packet in the receiving tray 24.

When it is desired to temporarily retain the record and transfer material in manifolding relation to receive subsequent inscriptions, by leaving relatively spaced unbroken intervals of the weakened lines 5, the shaft 27 of the roller 13 is provided with cam discs 28 beyond the supporting uprights 12, as shown in Fig. 5. These cams 28 act upon the vertically adjustable bearing blocks 29 of the shaft 16 to elevate the shaft and with it the discs 17 against the tension of the springs 20, to intermittently lift the discs 17 out of operative engagement with the manifold-

ing assembly and roller 13. At such intervals the disc 22, being elevated above the plane of the manifolding assembly, will not subject the record strips to bursting tension. However, during intermediate periods when the discs 17 and 22 are in operative relation with the strips, the record strips will be detached through successive relatively spaced lengths.

In the event that the manifolding assembly is marginally punched for use in a pin type feed writing or imprinting machine, the roller 13 may be provided with a series of spaced radial feeding pins 30 engageable in such holes for positively advancing the manifolding assembly in lieu of one of the rubber rimmed discs 17. A slotted plate 31 hinged to the supporting structure and overlying the manifolding assembly retains the punched margins of the strips in feeding engagement with the pins. Obviously such feeding pins 30 may be employed at both ends of the roller 13, either in association with or without one or both of the friction pressure discs 17. In such case the pins 30 not only advance the manifolding assembly, but also resist lateral retraction of the strips under influence of the breaking disc 22. In the event marginally punched manifolding material is employed, the series of marginal perforations are removed from one edge with the stub strip 6 left attached to the transfer material. If so desired, the peripheral groove 21 in the roller 13 and the coating disc 22 may be duplicated at the opposite side of the apparatus to simultaneously divide the record strips in like manner on second longitudinal weakened lines adjacent the marginal holes in the opposite margin of the strips.

The flaring or tapered yielding peripheral surfaces of the discs 17 are compressed and distorted at their points of contact with the roller 13 and interposed manifolding assembly, and by such distortion the discs exert an influence to deflect the assembly out of a straight path of travel, each in the opposite direction. By this outward feeding influence of the discs on the strips, the latter are maintained under tension across the groove 21, which tension is increased beyond the bursting strain by the pressure of the disc 22 upon the unsupported bridging portion of the initially stretched assembly.

While for illustrative purpose, but with no intent to unduly limit the scope or application of the invention, it is herein shown and described as applied to severing from continuous record strips marginally punched areas having therein longitudinally spaced feed holes, it is to be understood that it is not limited thereto, but may be employed for dividing webs of material on other differently positioned lines. One such purpose for which the apparatus is especially applicable is that of dividing fanfold manifolding material into plural record strips. To do so it is only necessary to position one or more peripheral grooves and corresponding breaker discs 22 in proper axially spaced relation to agree with the lines of division of the web. Although but a single groove 21 and corresponding breaker disc 22 has been illustrated, it is to be understood that any number thereof may be disposed at suitably spaced intervals throughout the length of the roller 13.

The resilient rims 18 of the feeding discs 17 are sufficiently larger than the breaker disc 22 and under ample compression to retain their feeding engagement with the strip assembly when

the feeding and breaking unit is elevated by the rotary cams 28.

The same effect of rupturing the weakened line only intermittently can be accomplished by notching or otherwise interrupting the circular periphery of the breaker disc 22, as shown at 32 in Fig. 7, thereby obviating the necessity for elevating and lowering the units by the cams 28.

From the above description it will be apparent that there is thus provided a device of the character described possessing the particular features of advantage before enumerated as desirable, but which obviously is susceptible of modification in its form, proportions, detail construction and arrangement of parts without departing from the principle involved or sacrificing any of its advantages.

While in order to comply with the statute the invention has been described in language more or less specific as to structural features, it is to be understood that the invention is not limited to the specific features shown, but that the means and construction herein disclosed comprise the preferred form of several modes of putting the invention into effect, and the invention is therefore claimed in any of its forms or modifications within the legitimate and valid scope of the appended claims.

Having thus described our invention, we claim:

1. An apparatus through which a continuous strip of material having therein a longitudinally disposed weakened line is passed for the purpose of dividing the strip on such line, feeding means for the strip including a feed roll and a pair of feed discs cooperating with the roll and including traction tires engageable with opposite margins of the strip and exerting thereon divergent travel influence by which the strip is transversely tensioned intermediate the discs, a peripheral groove in the roll in registry with which the weakened line of the strip is advanced and across which the transversely tensioned portion of the strip is bridged, and a pressure flange concentric with the discs and in registry with the groove into which it projects for subjecting the transversely tensioned portion of the strip to progressive bursting strain coincident with the weakened line thereof.

2. An apparatus for progressively dividing a continuous strip of material on a longitudinally weakened line, including means for progressively advancing the strip past a bursting position, means for transversely tensioning succeeding portions of the strip, and means for subjecting the transversely tensioned portion of the strip to pressure substantially perpendicular thereto in proximate relation with the longitudinal weakened line, the combined transverse tension and perpendicular pressure exceeding the resistance of the weakened line and subjecting the weakened material to bursting strain along such longitudinally weakened line.

3. An apparatus for progressively dividing a continuous strip of material on a longitudinally disposed weakened line, including a pair of feeding discs having resilient divergently beveled peripheries engageable with the opposite margins of the strip and tending to simultaneously advance the respective marginal portions of the strip through divergent paths of travel to thereby subject the intermediate portion of the strip to transverse tension, and pressure means for increasing the transverse tension of the strip beyond the bursting strain of the weakened lineal portion thereof.

4. In a strip dividing apparatus wherein a continuous strip of material is divided on a longitudinally disposed weakened line, strip feeding means for progressively advancing the strip past a bursting position, a recessed support for the strip across the recess of which the strip is bridged with the weakened line thereof in registry with the recess, means for progressively restraining the strip against transverse retraction while advancing it longitudinally and pressure means imposing upon the strip progressive pressure coincident with the recess in said support by which the strip is subjected to bursting strain in excess of the resistance of the weakened line.

5. In a strip dividing apparatus wherein a continuous strip of material is divided on a longitudinally disposed weakened line, a pair of resilient feeding discs engageable under compression with opposite margins of the strip, a coacting support over which the strip is advanced by the discs, said support having therein a recess across which the strip is bridged, and a pressure disc concentric with the feeding discs and normally projecting beyond the plane of the support into the recess thereof for subjecting the traveling strip to progressive bursting strain in excess of the tensile strength of the weakened lineal portion thereof.

6. In a strip dividing apparatus wherein a continuous strip of material is divided on a longitudinally disposed weakened line, a pair of relatively spaced resilient feeding discs having divergently tapered peripheries engaging the strip at opposite sides of the weakened longitudinal line of division, a roller with which the discs cooperate to advance the strip, a peripheral recess in said roller, a pressure disc located intermediate the feeding discs in registry with the recess in the roller and of sufficient size to project beyond the surface of the roller into said recess, the construction and arrangement being such that the strip is transversely tensioned as it passes between the discs and roller and the tension thereof is increased beyond the bursting strain of the lineal weakened portion by the progressive deflection of such weakened portion into the recess by the pressure disc.

7. In a strip dividing apparatus, relative to which a continuous strip of material is advanced for division on a longitudinal weakened line, a pair of members progressively engaging the strip at opposite sides of the weakened line and resisting sag of the strip intermediate the engaged points, pressure means progressively subjecting the strip intermediate the engaged points to bursting strain in excess of the tensile strength of the lineal weakened portion of the strip, and a recessed support for the strip across the recess of which the weakened portion of the strip is bridged and coincident with which the bursting pressure is applied.

8. In a strip dividing apparatus, relative to which a continuous strip of material is advanced for division on a longitudinal weakened line, a pair of members progressively engaging the strip at opposite sides of the weakened line and resisting sag of the strip intermediate the engaged points, pressure means progressively subjecting the strip intermediate the engaged points to bursting strain in excess of the tensile strength of the lineal weakened portion of the strip, a recessed support for the strip across the recess of which the weakened portion of the strip is bridged and coincident with which the bursting pressure is applied, and means for intermittently

relieving the bursting strain whereby the strip is progressively divided at longitudinally spaced intervals and left intact therebetween.

9. In a strip dividing apparatus, relative to which a continuous strip of material is advanced for division on a longitudinal weakened line, a pair of relatively spaced feeding discs engaging the strip at opposite sides of the weakened line, a pressure disc engaging the strip intermediate the feeding discs progressively contiguous to the weakened line, and relatively spaced supporting portions across the intermediate space of which the strip is bridged and coincident with which the pressure disc engages the strip and upon which it exerts bursting pressure in excess of the tensile strength of the weakened lineal portion.

10. In a strip dividing apparatus, relative to which a continuous strip of material is advanced for division on a longitudinal weakened line, a pair of relatively spaced feeding discs engaging the strip at opposite sides of the weakened line, a pressure disc engaging the strip intermediate the feeding discs progressively contiguous to the weakened line, relatively spaced supporting portions across the intermediate space of which the strip is bridged and coincident with which the pressure disc engages the strip and upon which it exerts bursting pressure in excess of the tensile strength of the weakened lineal portion, and means for intermittently raising and lowering the pressure disc in synchronism with the advancement of the strip to effect intermittent division of the strip on its weakened line leaving intermediate portions thereof intact.

11. In a strip dividing apparatus, relative to which a continuous strip of material is advanced for division on a longitudinal weakened line, feeding means for progressively advancing the strip past a bursting position, means for restraining the portions of the strip at opposite sides of the longitudinal weakened line against inward movement, relatively spaced supporting portions for the strip having an intervening space therebetween with which the longitudinal weakened line substantially registers, and a pressure member engageable with the strip in proximate relation with the weakened line for subjecting the strip to progressive transverse bursting pressure in excess of the tensile strength of the lineal weakened portion thereof.

12. In a strip dividing apparatus, relative to which a continuous strip of material is advanced for division on a longitudinal weakened line, feeding means for progressively advancing the strip past a bursting position, means for restraining the portions of the strip at opposite sides of the longitudinal weakened line against inward movement, relatively spaced supporting portions for the strip having an intervening space therebetween with which the longitudinal weakened line substantially registers, a pressure member engageable with the strip in proximate relation with the weakened line for subjecting the strip to progressive transverse bursting pressure in excess of the tensile strength of the lineal weakened portion thereof, and automatic means for intermittently relieving the pressure of said pressure member to effect intermittent division of the strip on its weakened line, leaving intermediate portions thereof intact.

13. In a strip dividing apparatus relative to which is advanced a continuous strip of material having therein a succession of longitudinally spaced configurations for progressive engagement of a pin type feeding device and a lineal weakened

line upon which the strip is to be divided, a pin type feeding device having progressive engagement with the longitudinally spaced configurations thereof for positively advancing the strip past a strip bursting position, means for restraining the portions of the strip at opposite sides of the lineal weakened line against inward movement, relatively spaced supporting portions for the strip having an intervening space therebetween with which the lineal weakened line substantially registers, and a pressure member engageable with the strip in proximate relation with the weakened line for subjecting the strip to progressive transverse bursting pressure in excess of the tensile strength of the lineal weakened portion thereof.

14. In a strip dividing apparatus relative to which is advanced a continuous strip of material having therein a succession of longitudinally spaced configurations for progressive engagement of a pin type feeding device and a longitudinal weakened line upon which the strip is to be divided, a pin type feeding device having progressive engagement with the longitudinally spaced configurations thereof for positively advancing the strip past a strip bursting position, means for restraining the portions of the strip at opposite sides of the longitudinal weakened line against inward movement, relatively spaced supporting portions for the strip having an intervening space therebetween with which the longitudinal weakened line substantially registers, a pressure member engageable with the strip in proximate relation with the weakened line for subjecting the strip to progressive transverse bursting pressure in excess of the tensile strength of the lineal weakened portion thereof, and automatic means for intermittently relieving the pressure of said pressure member to effect intermittent division of the strip on its weakened line, leaving intermediate portions thereof intact.

15. The herein described method of longitudinally dividing a continuous strip on a longitudinal weakened line, including progressively subjecting the strip to transverse tension and simultaneously subjecting an unsupported portion of the strip contiguous to the weakened line to perpendicular pressure by which its transverse tension is increased to the bursting point of the weakened line.

16. The herein described method of dividing a continuous strip of material on a longitudinal weakened line, including the step of exerting upon portions of the strip at opposite sides of the longitudinal weakened line progressive advance feeding influence in relatively divergent directions by which the portion of the strip contiguous to the weakened line is progressively subjected to transverse tension, and progressively subjecting an unsupported portion of the strip contiguous to the weakened longitudinal line to substantially perpendicular pressure by which the transverse tension of the strip at such point is increased beyond the bursting point of the longitudinal weakened portion.

17. The herein described method of dividing a continuous strip of material on a longitudinal weakened line, including the step of exerting upon portions of the strip at opposite sides of the longitudinal weakened line progressive advance feeding influence in relatively divergent directions by which the portion of the strip contiguous to the weakened line is progressively subjected to transverse tension, and intermittently subjecting an unsupported portion of the strip contiguous to the

weakened line thereof to additional pressure by which the transverse tension is intermittently increased beyond the bursting point of the weakened lineal portion to thereby divide the strip on such line at successive spaced intervals, leaving intermediate portions thereof intact.

18. In an apparatus for separating initially collectively attached alternating records and transfer strips including tensioning means for progressively subjecting the record strips to transverse tension strain independently of the interleaved transfer material in excess of the tensile strength of preformed longitudinal weakened division lines thereof, means for progressively gripping margins of the record and transfer strips collectively at one side of the assembly and the opposite margins of the record strips independently of the interleaved transfer strips, and simultaneously subjecting the record strips to progressive pressure intermediate their margins in excess of the tensile strength of preformed longitudinal division lines of the record strip, the construction and arrangement being such that the interleaved transfer strips will remain intact and attached to each other with longitudinally divided portions of the record strips attached thereto, while the remainders of the record strips will be independent of the transfer strips and of each other.

19. The herein described method of bursting initially collectively interconnected alternating record and transfer strips, including intermittently dividing the record strips only upon preformed longitudinal weakened division lines, leaving the transfer strips intact and connected one to another with the longitudinally divided portions of the record strips attached thereto.

20. The herein described method of separating continuous interconnected record sheets from interleaved transfer strips, including progressively transversely tensioning the record strips independently of the interleaved transfer strips and subjecting the tensioned record strips independently of the transfer to bursting pressure in excess of the tensile strength thereof.

21. The herein described method of bursting initially marginally attached continuous superposed strips of record and transfer material, which consists in subjecting the record strips to intermittent transverse tension strain in excess of the tensile strength thereof independently of the interleaved transfer strip whereby the record strips are divided at spaced intervals on preformed longitudinal weakened lines leaving continuous portions of the record strips attached to the transfer strips.

22. The herein described method of bursting initially marginally attached continuous superposed strips of record and transfer material, which consists in collectively grasping one marginal edge of the assembly of record and transfer strips and simultaneously grasping the opposite margins of the record strips independently of the interleaved transfer strips and intermittently subjecting the intermediate portions of the record strips to tension in excess of the tensile strength of preformed longitudinal division lines thereof.

23. The method for bursting initially collectively attached alternating record and transfer strips, including the step of intermittently subjecting the record strips to transverse tension independently of the interleaved transfer material in excess of the tensile strength of longitudinal weakened lines thereon.

24. In an apparatus for removing from a con-

tinuous strip of material a longitudinal marginal portion thereof, strip tensioning means for progressively subjecting the strip to transverse tension, and pressure means operative to progressively increase the tension of the strip in excess of the tensile strength of a longitudinal weakened division line thereof.

25. In an apparatus for separating initially collectively attached record and transfer strips, including strip tensioning means for intermittently transversely tensioning the record strips independently of the transfer strips in excess of the tensile strength of the record strips on longitudinal weakened lines thereof, the construction and arrangement being such that longitudinally separated portions of the record strips remain at-

tached to the transfer strips while at spaced intervals the remainders of the record strips are detached therefrom.

26. The herein described method of separating alternating initially attached record and transfer material strips, including the step of progressively longitudinally dividing the attached record strips at spaced intervals on longitudinal weakened division lines thereof independently of the transfer strips, leaving continuous longitudinal portions of the record strips attached to the transfer strips and the latter intact and the remainders of the record strips attached at spaced intervals to the aforementioned longitudinal portions thereof.

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