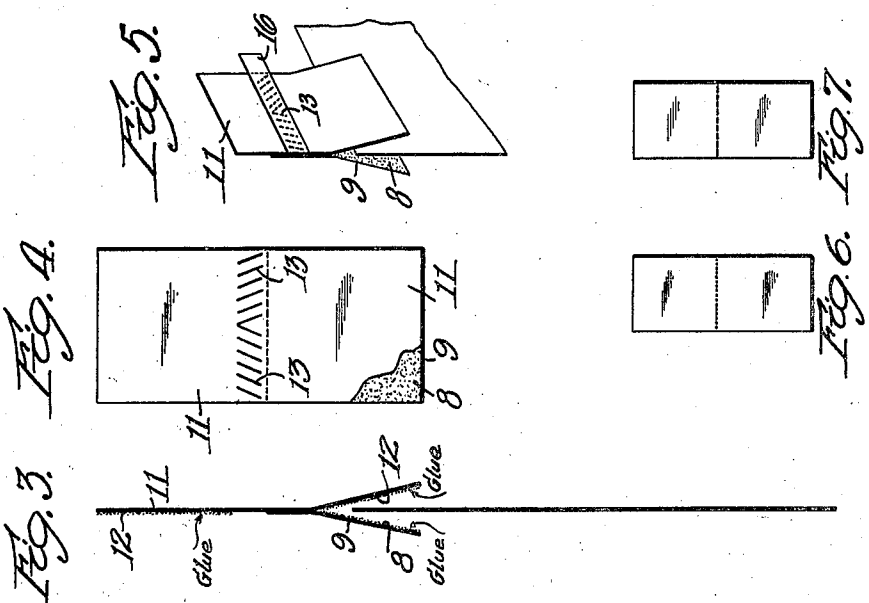
May 5, 1936. H. A. W. WOOD 2,039,696

WEB ROLL TAB

Filed July 19, 1933



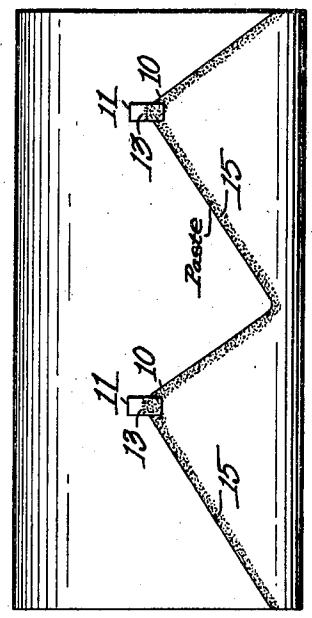


Fig. 1.

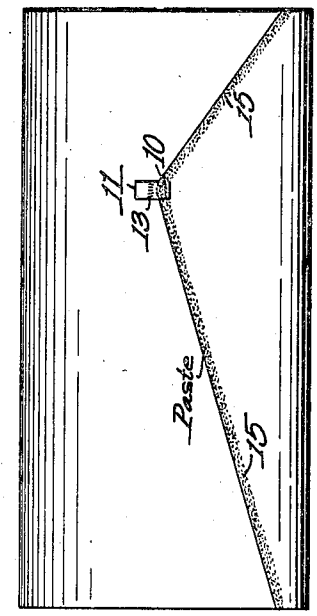


Fig. 2.

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WEB ROLL TAB

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12 Claims. (Cl. 242—58)

This invention applies to that type of machine which is used in splicing web rolls and is particularly applicable to the webs used in newspaper printing presses.

In a web roll splicing machine, when one web roll is nearly run off, a new roll is brought up to synchronous speed of the web and at the proper time the old web is pressed against the new roll and the splice is made. In bringing this new roll up to synchronous speed it is necessary not only to hold down the forward end of this new roll so that it is not thrown off by centrifugal force or by air but to hold it on lightly enough so that, when the old web is applied to this new roll, the point attaches itself to this old web without serious disturbance.

The objects of this invention are to provide an article of manufacture which may be easily attached to the point or points which are customarily cut on the forward end of a new roll of paper and secured against the body of the roll, and which carries a weakened portion of predetermined strength which is severed when the point or points attach themselves to the old web; to provide for eliminating the inconsistencies incurred in the former practice of holding a point down with grease, and to provide a relatively firm means for holding the front edge for any length of time, which will not lose its adhesiveness.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawing, in which

Fig. 1 is a view of a paper roll cut with two points, each individual point being held by the autopaster tab.

Fig. 2 is a similar view of a paper roll carrying a single point;

Figs. 3 and 4 are detailed edge and face views of the tab and the preferred means by which the breaking point is weakened;

Fig. 5 shows a modified construction of the tab, and

Figs. 6 and 7 are views of modifications.

The present method of making the paster is to cut the end of the paper on the new roll at an angle with the point leading forward and hold it against flying off by little spots of grease at several points under its front edge and then spread paste along a line the entire length of the cut slightly back from the edge. It frequently happens that this roll, after being prepared in this way, remains in position for some time before the paster is made. In such a case the grease loses its adhesiveness and, when the roll is loaded, wind is liable to get under the front edge of the sheet and cause it to fly off. This entails different kinds of damage and much delay.

Of course, it is necessary to hold the front edge of the web against the roll temporarily in such a way that when the paster is made it will let go of the roll and allow the new web to be fed into the press without any material resistance. This, of course, applies to those cases in which the paster is made without stopping the web or the press. According to this invention a relatively firm means is provided for holding the front edge for any length of time which will not lose its adhesiveness by the lapse of time. For this purpose paste is provided instead of grease and the strip is perforated so that when the paster is made it will break away.

The web roll can be provided with two or more points 10 on the leading edge of the web as shown in Fig. 1 or with a single point as shown in Fig. 2. In either case the points are attached to the roll by a strip of frangible material, as paper, 11 to which two spots of adhesive, as paste or glue, 12 are applied at opposite ends and on the same side and separated from each other. Between these spots and preferably at the center of the strip is a line of perforations 13. These strips are applied to the points so that the line of perforations is beyond the paste points 12 and the strip is pasted both to the point and to the next course of paper on the roll.

It will be seen from Fig. 3 that a side view of the preferred form of tab has the appearance of an inverted Y. An extra piece of paper 9 is shown secured to the paper 11 at one end and having a spot of glue 8 on the inner surface. The insides of the prongs of the Y carry glue which when moistened and closed over the point of the web secure that end of the tab firmly to the point. The side of the single end of the Y which is next to the paper roll is covered with similar glue so that it may be attached securely to the paper roll. By the use of the line 15 of paste over the tabs, they have an adhesive on both sides.

Fig. 4 shows at just what position the weakened part of the tab lies and illustrates one embodiment of the invention which comprises slits cut across the tab on an angle such that when a force is applied to pull the two ends apart there is a tearing action on this weakened portion of the tab rather than a bursting action which would be present were these slits not made

at an angle. This tearing action insures a consistency of strength which is difficult to maintain in the type of tab weakened by a straight row of perforations in a single line. The duplex portion of the tab which comprises the leading edge of the new web has added stiffness because of its being double thickness and thus is useful in preventing the turning back of the leading edge.

In preparing a new roll for splicing, the operator cuts or tears his points, dampens the paste portions of his tab, encloses each point with the double end of the tab and smooths the paper down so that the other end of the tab attaches itself to the paper roll. A line of paste 15, preferably of the non-drying type, is then applied along the edge of the point or points, as in Figs. 1 and 2, and covers the doubled portion of the tab down to the breaking point. It sometimes happens that in the placing on of this tab or in the putting on of paste this weakened portion of the tab is accidentally broken or damaged.

A modification of the paster tab is shown in Fig. 5 where the general Y shape of the tab is maintained but an additional feature is present in a detachable strip 16 which augments the weakened portion of the tab. This tab is put on as shown in Fig. 5 and will stand rough usage. The paste which is placed on the point by the operator is brought down over the duplex end of this tab and may cover a portion of the detachable strip. When the operation of putting on the paste is completed this detachable strip 16 is torn off which leaves the two ends of the tab held together only by that predetermined strength. Thus this detachable strip serves two purposes: one, it allows the operator to place the tab on with less danger of breaking the weakened portion; and two, it demands less care in putting on the paste with the assurance of paste near the breaking point.

This invention has two particular advantages: different operators or the same operator at different times would place on more or less grease which would make the holding-on strength vary, furthermore, grease varies materially in its holding-on power at different temperatures and according to the length of time that it has been on the paper.

This is a permanent attachment, so to speak, taking the place of the usual grease spots. No amount of drying out will reduce its effectiveness for this purpose. It is always ready for use and perfectly effective after once being applied.

The expiring web is pressed against the new roll which is rotating and the usual line of paste 15 placed along the outer edge of the loose end of the web, on the roll over the tabs, sticks to the expiring web. The motion of this web away from the roll, or rather the rotation of the roll to swing the part of the strip 11 that is attached to the roll away from the expiring web, necessarily pulls the strip apart along the line of perforations 13. Half of the strip remains on the paper of the roll and the other half is attached to the leading end of the web on the roll and passes into the press with the expiring web.

Figs. 6 and 7 show the elemental idea of the tab with a weakened section reduced to its simplest terms. In Fig. 7 the weakened section is made up of a series of slits perpendicular to the line of travel of the web.

This constitutes a simple and effective means for holding the new web roll in proper condition until it is to be used, no matter how long that may be, and affords a sure means for separating the leading end from the roll when the paster is made.

Although I have illustrated and described only a few forms of the invention I am aware of the fact that other modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore I do not wish to be limited in this respect otherwise than as set forth in the claims, but what I do claim is:—

1. As an article of manufacture, a tab for the purpose described having adhesive at opposite ends with a space between the same for securing it respectively to the leading edge of a web roll and to the surface of a web roll and a line of slits across the tab in the said space, said slits extending at an angle to the longitudinal direction.

2. As an article of manufacture, a tab for connecting the leading edge of a web roll to the surface of the web roll, said tab having spots of dried adhesive spaced apart at its opposite ends on one side by which it can be secured to the leading edge and the surface of the roll and provided with a series of parallel slits between the said two spots and spaced apart to form a weakened area, for the purpose described.

3. As an article of manufacture, a tab for securing the leading edge of a web roll to the surface of the roll having adhesive at opposite ends, provided with a series of perforations across it, and having a detachable strip over the weakened area which will prevent the accidental breakage of the tab along the line of perforations and can be removed to leave the tab weakened at this point.

4. As an article of manufacture, a tab for securing the leading edge of a web roll to the surface thereof comprising a strip having adhesive at both ends for securing one end to the leading edge of the web and the other to the surface of the roll and provided with an extra piece permanently secured to the tab beyond one end and having adhesive upon it on the face adjacent the adhesive at that end of the strip, whereby the two spots of adhesive thus provided can be secured to the opposite sides of the leading edge of the web to secure the web firmly at that point.

5. As an article of manufacture, a tab for securing the leading edge of a web roll to the surface thereof comprising a strip having adhesive at both ends for securing one end to the leading edge of the web and the other to the surface of the roll and provided with an extra piece permanently secured to the tab beyond one end and having adhesive upon it on the inside face, whereby the two spots of adhesive thus provided can be secured to the opposite sides of the leading edge of the web to secure the web firmly at that point, and a line of perforations across the tab between the extra piece and the adhesive at the other end, for the purpose described.

6. The combination with a web roll having a leading edge having a point, a tab adhering thereto and projecting beyond the edge of it and adhering to the surface of the roll and provided with a weakened portion across it, and a line of wet paste on the leading edge of the web covering the outer surface of said tab.

7. As an article of manufacture, a tab for connecting the leading edge of a web to the surface of a web roll, said tab having a single ply for

attachment to the web roll, a double ply for enclosing the leading edge of the web, and a weakened portion connecting the single ply with the double ply.

8. As an article of manufacture, a tab for connecting the leading edge of a web to the surface of a web roll, said tab having a single ply for attachment to the web roll and a double ply for enclosing the leading edge of the web.

9. As an article of manufacture, a tab for the purpose described, said tab being weakened by slits disposed at an angle to the length of the tab.

10. As an article of manufacture, a tab for the purpose described, said tab being weakened by a plurality of series of slits, one series on one side disposed at an angle, and another series on the other side disposed at an opposite angle.

11. The combination with a roll of paper for supplying a printing press of a tab for holding the leading edge of the web to the roll during rotation of the roll preliminary to making a paster joining said web to the traveling web from an expiring roll, said tab having adhesive on one side thereof at one end adhering to the under side of said leading edge of the web and on the other side thereof at the other end adhering to the body of the roll, and having intermediate diagonal slits to facilitate the tearing thereof when the paster is made.

12. The combination with a roll of paper for supplying a printing press of a tab for holding the leading edge of the web to the roll during rotation of the roll preliminary to making a paster joining said web to the traveling web from an expiring roll, said tab having adhesive thereon connecting the same to the leading edge of the web and to the body of the roll respectively and having diagonal slits intermediate the points of attachment to said web and roll respectively to facilitate tearing of said tab upon the making of a paster.

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