The present invention relates to improvements in printed articles and the method of making the same.

Hereinbefore in the production of printed articles such as newspapers and the like it has been the practice to utilize for printing purposes only that area of the associated webs defined within substantial outer edge and fold line marginal borders. This practice has existed up to the present invention partly because of lack of appreciation of the valuable space being wasted for advertising purposes and the like and partly due to difficulties connected with the printing of the webs in a manner giving the results accomplished by the present invention.

An object of the present invention is to increase the effectiveness and the space available for advertising purposes in newspapers and the like.

Another object is to provide a method of increasing the space available for advertising purposes in newspapers and the like which may be applied to presses now in operation without making any changes in present printing practices.

Another object is to provide a method of associating with the printed webs of a newspaper press or the like, an auxiliary web or webs upon which desired indicia such as advertisement matter or the like may be carried.

Another object is to provide a method of associating with the printed webs of a newspaper press or the like a narrow web or tape having upon one side a surface possessing adhesive characteristics when moistened or otherwise treated and having printed upon the other side advertising matter or the like.

A further object is to provide a method of associating with and applying to printed webs of a newspaper press or the like, at press speed, a narrow web or tape carrying printed matter; the narrow tape being attached along an unprinted margin of the printed webs.

A still further object is to provide a printed article such as a newspaper or the like having in addition to the conventional printed web, an additional web located along a normally unprinted margin; the additional web being adapted to carry additional printed matter.

Other objects and advantages residing in the present invention will be hereinafter set forth and become readily apparent when the description and claims are considered in connection with the accompanying drawings wherein.

Fig. 1 is a diagrammatic representation of the principles of the invention being applied to a printing press showing one arrangement for associating the auxiliary web with the printed webs.

Fig. 2 is a plan view of the diagrammatic representation shown in Fig. 1, particularly disclosing the manner in which the auxiliary web is fed into the press.

Fig. 3 is a diagrammatic representation of a modified arrangement for associating the auxiliary web with the printed webs of the press.

Fig. 4 shows a printed article having the auxiliary web united along the unprinted area defining the fold line region.

Fig. 5 is a modified form of a printed article having the auxiliary web applied to the outer printed web contiguous with the fold line, and Fig. 6 is a plan view of one form of a suitable auxiliary web.

According to the present invention we propose to associate with the printed webs in newspaper presses or the like an auxiliary web which is preferably united to one or more of the printed webs along the fold line region of the printed article. In the preferred form of the invention the auxiliary web carries printed indicia upon one side and possesses adhesive characteristics upon the other enabling the web to be readily attached to one of the webs being printed upon in the press.

As illustrated, in one embodiment, the auxiliary web or tape is being applied to the fold line of the center web. In another embodiment, the auxiliary web is being applied to the outer web and after the associated webs have passed the former of the press. If desired, however, the auxiliary web may be applied to one or more of the inner webs and for example may be applied to the outer web prior to, or while, passing over the former when it is not convenient to locate the required apparatus below the former. Moreover, two or more auxiliary webs may be attached to the said webs upon opposite sides of the fold line proper, along the outer side margins or anywhere between the margins of the unprinted web as desired.

Referring to the accompanying drawings wherein several forms of the invention are shown for the purpose of illustration, in Fig. 1, webs 10, 12, 14 and 16 are indicated as coming from the printing rollers (not shown) and being associated at the roller 18 for passage over the former 20, all as is well known in newspaper presses and the like. At 22 is indicated a roll of auxiliary web or tape 24 which is fed into the press by being passed around angle bars 26 and 28 and, together
with the web 10, is passed between the idler rolls 30 and 31. In association with the web 10, the auxiliary web 24 is assembled with the remaining webs at the top of the former and is folded and delivered with the printed article defined by the webs 10, 12, 14 and 16.

In one form of the invention, the web 24 is characterized by the fact that one side thereof possesses adhesive properties when subjected to a suitable treatment in the press. For example, the web may be treated upon one side with a suitable adhesive which is normally non-tacky and then moistened in the press by contacting with the transfer roll 32 being supplied with water from the roll 36 operating in the tank 38. After being moistened the adhesive upon one side of the web 24 will become tacky and will adhere to the web 10 as the two webs are passed together between the rolls 30 and 31. Other self suggesting arrangements include applying an adhesive to the web 24 by the transfer roll 32 in lieu of merely rendering tacky in the press a web previously treated with an adhesive or applying an adhesive to the portion of the web 10 to which the web 24 is to be adhered. The web 24 may differ from the remaining webs by being relatively narrow, of contrasting color, material, etc., and may carry any desired indicia which in most cases will be of an attention compelling character suitable for advertising. In Fig. 2 the roll 25 is shown conveniently located to one side of the former and associated structure. It should be obvious that the arrangement shown may be conveniently adapted to presses now in operation.

As more clearly shown in Fig. 4, newspapers, for example, are generally printed in two sections 33 and 40 upon the same side of a single web with an unprinted marginal outer edge and fold line portions 42 and 44, respectively. The tape 26 is shown superimposed upon the unprinted portion of the web 10 along the fold line region 46. As previously stated the web 26 may be advantageously applied along any one or more of the longitudinally extending unprinted areas of the printed web and to any one or more of the associated printed webs of the printed article. As should be readily apparent, the web 24 is conveniently applied to the fold line region of the center web of the folded printed article, which web would be the web 10 in the arrangement shown.

In Fig. 1. If desired register mark 47 may be provided upon the auxiliary web 24 to assure proper alignment of the indicia carried by the web 24 in its associated relation with the printed web.

A modified arrangement is shown in Fig. 3 whereby auxiliary webs 48 may be applied to the unprinted portion upon either and opposite sides of the fold line 50 (see Fig. 5) of the outer web of the printed article, which would correspond to the web 10 shown in Fig. 1. As in the case of the web 24, the webs 48 upon being passed over the transfer roll 52 may be rendered tacky by application of moisture in cases where the webs have been previously treated with an adhesive or may be treated with an adhesive by the transfer roller 52. With this arrangement application of the auxiliary web or webs takes place at a point beyond the former 20 and before the associated webs pass to the punch rolls 56 and hence to the folder (not shown).

In practice, if desired, auxiliary webs may be applied to the unprinted area of one or all of the inner webs as well as to the unprinted areas of the outer web of the same printed article.

From this it should be readily apparent that the herein disclosed invention materially increases the space available for advertising purposes in newspapers and the like and enables the indicia to be presented in an effective manner as in contrasting color, etc. Moreover, it opens the way to innumerable variations in presentation of advertising matter and the like which would be prohibitive, from the cost consideration, if attempted to be carried out upon the printing press along conventional lines. As the auxiliary web or webs are associated with the usual printed webs at press speed, the production of the press is not reduced.

We also wish to anticipate printing upon the auxiliary web as it is being fed into the press.

This has the advantage of rendering our proposed method more flexible in certain aspects than in the case where the auxiliary web is printed before the run of the press. The annexed claims have been drawn to include such a arrangement.

The present invention offers, in addition to the indicia carried by the auxiliary web or webs, a further opportunity for effective advertising. If desired, perfume or other highly odorous fluids may be added to the moistening fluid for the auxiliary web, thus fortifying the message of manufacturers of perfumes and cosmetics with an appeal to the sense of smell.

Having described our invention what we believe is patentable and desire to protect by Letters Patent is:

1. A method of associating webs in newspaper presses and the like comprising the steps of feeding a plurality of relatively wide webs into the press, printing upon said webs to provide printed areas bordered by longitudinally extending unprinted areas, feeding a previously printed narrow web into said press having adhesive characteristics at one side thereof, said narrow and wide webs being coextensive along their associated lengths, said narrow web in width approximating the width of one of said unprinted areas, and uniting said narrow web to one of said other webs along said unprinted area at press speed.

2. A method of associating webs in newspaper presses and the like comprising the steps of feeding a plurality of relatively wide webs into the press, printing upon said webs to provide printed areas bordered by longitudinally extending unprinted areas, feeding a narrow web into said press, treating said narrow web to render at least a portion of one surface thereof tacky, said narrow and wide webs being coextensive along their associated lengths, said narrow web in width approximating the width of one of said unprinted areas, and uniting said narrow web to one of said other webs along said unprinted area at press speed.

3. A method of associating webs in printing presses and the like comprising the steps of feeding a plurality of relatively wide webs into the press, feeding a relatively narrow web previously printed on one side into said press along said wide web, said narrow web having the other side thereof coated with a non-tacky adhesive, treating one side of said narrow web in said press to render the adhesive thereof receptive upon said wide web to provide printed areas bordered by unprinted areas, and uniting said narrow web to one of said wide webs along an unprinted area thereof, said narrow and wide webs being coextensive along their associated lengths.

4. A method of associating webs in printing presses and the like comprising the steps of feed-
ing a plurality of relatively wide webs into the press, printing upon said webs to provide printed areas bordered by unprinted areas, feeding a relatively narrow previously printed web into said press having one side thereof coated with a non-tacky adhesive, treating said narrow web to render the adhesive thereof tacky and superimposing said narrow web on one of said wide webs prior to association of said wide webs at the top of former, said narrow web being imposed upon said wide web along an unprinted area thereof and being fixed thereto, said narrow and wide webs being coextensive in length and being fed into the press at the same speed.

5. A method of associating webs in newspaper presses for producing newspapers longitudinally folded and having a narrow printed web disposed contiguously with the fold line, comprising the steps of feeding a plurality of relatively wide webs into the press, printing upon said webs to provide printed areas bordered by unprinted areas along the fold line region, feeding a relatively narrow web previously printed on one side into said press, said narrow web in width approximating the width of the unprinted areas along said fold line region treating said narrow web on the other side thereof to render the same tacky, and uniting said narrow web to one of said wide webs along the unprinted area contiguous with the fold line region thereof, said narrow and wide webs being coextensive in length.

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