The main objects of our invention are:
First, to provide an improved apparatus for making striped paper in which the color is applied during the process of manufacture, the lines of color being very distinct and definite.

Second, to provide an apparatus of this character which is very simple and readily embodied in paper making machines of the Fourdrinier type.

Third, to provide a method of striping paper whereby the color is applied during the process of manufacture.

Objects pertaining to details and economies of our invention will definitely appear from the description to follow. The invention is defined in the claims.

A structure illustrating the manner of carrying out our invention is clearly illustrated in the accompanying drawings, in which:

Fig. 1 is a fragmentary side elevation of a paper making machine of the Fourdrinier type embodying our improvements, parts being shown in longitudinal section on line 1—1 of Fig. 2 and in conventional form.

Fig. 2 is a fragmentary transverse section on line 2—2 of Fig. 1.

Fig. 3 is an enlarged detail longitudinal section.

In the accompanying drawings 1 represents the breast roll and 2 the forming wire or web of a paper making machine of the Fourdrinier type. The suction box is indicated at 3 and the feed box at 4, one of its discharge gaskets being shown at 5. These parts are shown in conventional form as their structural details form no part of this invention.

Above the forming web I mount a plurality of color troughs 6, 7 and 8 which are preferably arranged in superimposed relation on a cross bar 9 carried by the brackets 10.

The color troughs 6, 7 and 8 are provided with delivery conduits 11, 12 and 13, respectively. These conduits are arranged with their lower ends in alignment and adjacent to but spaced from the forming web. Each conduit is provided with a wick 14, the upper ends of which project into the color troughs. The lower ends of the wicks depend from the conduits into wiping engagement with the web of paper or pulp 15 on the forming web of the paper making machine. The wicks engage the paper and deliver color thereto in advance of the suction box so that the color is drawn through the web of paper at the suction box.

The conduits of the several troughs are arranged in alternating relation; that is, they are arranged in sets or groups in the embodiment illustrated, although, of course, this arrangement may be varied. The conduits of the several troughs are interposed so that the desired arrangement of color stripes is secured on the web.

By this apparatus and method color is applied to the web with great uniformity and the stripes are distinct and straight. By this method the color is applied economically and a great variety of effects may be secured.

Having thus described our invention what we claim as new and desire to secure by Letters Patent is:

1. The combination with a forming web of a paper making machine and a suction box operatively associated therewith, of a plurality of color troughs disposed transversely above said forming web in superimposed relation in advance of said suction box, a plurality of conduits leading from the several troughs and having their lower ends arranged in alignment and adjacent to but spaced from the forming web, the conduits of the several troughs being arranged in alternating relation, and wicks in said conduits having their lower ends projecting therefrom into engaging relation to the plisp or web of paper on the forming web.

2. The combination with a forming web of a paper making machine and a suction box operatively associated therewith, of a plurality of color troughs disposed above said forming web in advance of said suction box, a plurality of conduits leading from the several troughs and having their lower ends arranged adjacent to but spaced from the forming web, the conduits of the several troughs being arranged in alternating relation, and wicks in said conduits having their lower ends projecting therefrom into engage-
ing relation to the pulp or web of paper on
the forming web.
3. The combination with a forming web of
a paper making machine and a suction box
operatively associated therewith, of a plu-
arity of color troughs disposed above said
forming web in advance of said suction box,
a plurality of conduits leading from the sev-
eral troughs and having their lower ends ar-
ranged adjacent to but spaced from the form-
ing web, and wicks in said conduits having
their lower ends projecting therefrom into
coacting relation to the pulp or web of paper
on the forming web.
4. The combination with a forming web of
a paper making machine and a suction box
operatively associated therewith, of a plu-
arity of color troughs, a plurality of conduits lead-
ing from each of said troughs and arranged
in spaced interposed relation transversely of
the forming web and in advance of the suc-
tion box, and wicks in said conduits having
their lower ends projecting therefrom into
contacting relation to the pulp or web of
paper on the forming web.
5. The combination with a forming web of
a paper making machine, a plurality of color
troughs, a plurality of conduits leading from
each of said troughs and arranged in spaced
interposed relation transversely of the form-
ing web, and wicks in said conduits having
their lower ends projecting therefrom into co-
aracting relation to the pulp or web of paper
on the forming web.
6. The combination with a forming web of
a paper making machine, of a plurality of
sets of color conduits, the conduits of each set
having a separate source of supply, the con-
duits of the sets being arranged in a series of
groups, and wicks in said conduits having
their lower ends projecting from the conduits
into coacting relation to the pulp or web of paper
on the forming web.
7. The combination with a forming web of
a paper making machine, of a plurality of
sets of color conduits, the conduits of each set
having a separate source of supply, the con-
duits of the sets being arranged in interposed
relation transversely of the forming web, and
wicks in said conduits having their lower ends
projecting from the conduits into coacting
relation to the pulp or web of paper on the
forming web.
8. The combination with the forming web
of a paper making machine and a suction box
operatively associated therewith, a color
trough disposed above said forming web, a
plurality of conduits leading from said
trough and having their lower ends disposed
adjacent to the forming web, and wicks in
said conduits having their lower ends pro-
jecting therefrom into contacting relation
with the pulp or web of paper on the form-
ing web in advance of the suction box.
9. The combination with the forming web