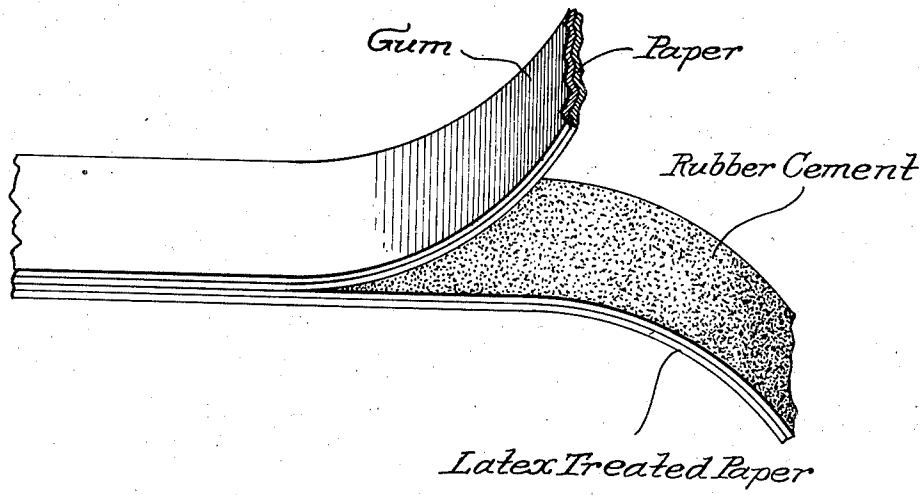
Jan. 10, 1939. F. W. HUMPHNER 2,143,600

GUMMED TAPE

Filed July 29, 1935



Inventor:
Ferdinand W. Humphner,
By Dyrenforth, Lee, Chrittons & Wiles,
Attys.

Patented Jan. 10, 1939 2,143,600

UNITED STATES PATENT OFFICE

2,143,600

GUMMED TAPE

Ferdinand W. Humphner, Oak Park, Ill., assignor, by mesne assignments, to Mid-State Gummed Paper Co., a corporation of Delaware

Application July 29, 1935, Serial No. 33,779

3 Claims. (Cl. 154—43)

This invention relates to gummed tape and more particularly to gummed paper tape provided with a reinforcing of latex-treated paper.

An object of the invention is to provide a reinforced or latex-treated paper provided with adhesive or gum, and more particularly a latex-treated paper provided with a water-soluble gum or adhesive.

The invention is illustrated, in a preferred embodiment, by the accompanying drawing, in which is shown a perspective view of a gummed paper strip or tape embodying my invention, the strip of gummed paper being shown separated from the rubber cement and latex-treated paper near one end of the strip.

Latex-treated paper is a well known product. It is made ordinarily by passing an unsized or absorbent paper into a bath containing a latex preparation. The paper is then passed, usually on a wire net or screen, into suitable drying apparatus and then through several subsequent operations in which the external surfaces of the product are cured.

The use of such a latex-treated strip as a gummed tape is much desired because of the strength and flexibility of the product. However, such use has heretofore been found impracticable because of the tendency of the latex, which contains moisture, to soften the gum layer. Many expedients have been employed in treating the external surfaces of the latex-treated strip in an effort to render it satisfactory for the placing of gum thereon, but all of such expedients, as far as my knowledge goes, have failed.

In my co-pending application Serial No. 1,785, for Multi-ply latex-treated paper, I have set out one method for adapting latex-treated paper for use as a gummed tape. In this method, the latex-treated strip is pressed between two strips of sized paper, the sizing being such as to prevent the penetration of the latex through the outer strips.

My present invention consists of a simpler method, producing a product having advantages over the one described above.

In my present method, I provide one strip of paper with a layer of gum. Another strip of paper, which is preferably unsized, is treated in a latex bath in the usual manner. The latex-treated paper is then covered on one side with a quick-drying rubber cement, which preferably contains methyl alcohol or benzol, or some similar fast-drying solvent. The two strips of paper are then combined by the rubber cement, leaving the gummed surface on the top of the strip and the latex-treated paper on the bottom thereof, as illustrated in the drawing. The rubber cement not only serves as a bond between the latex-treated paper and the gummed paper, but also provides a water-proof sheet between the latex and the gummed paper, thus preventing the passing of any moisture from the latex into the gummed layer.

The new product, it will be seen, thus comprises but two strips of paper, one containing the gummed layer and the other containing the latex reinforcement, the latex being rendered innocuous, as far as affecting the gum is concerned, by the cementing material between the two strips.

After the two sheets are combined, the latex-treated sheet is embossed with a cloth pattern to give it a textile appearance as well as to increase its flexibility.

The tape product resembles very closely in appearance a cloth-reinforced tape, and while affording an extremely tough and resistant body, is substantially as flexible and as pliable as a cloth-reinforced tape.

The foregoing detailed description has been given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, but the appended claims should be construed as broadly as permissible, in view of the prior art.

I claim:

1. A gummed tape comprising a strip of paper, a layer of water-soluble gum on one side of said paper, a cellulose sheet impregnated with rubber deposited from latex, and rubber deposited from an organic solvent uniting the other side of said paper strip and cellulose sheet.

2. A gummed product comprising a paper strip coated on one side with a layer of water-soluble gum, a paper strip impregnated with rubber deposited from latex, and rubber deposited from an organic solvent uniting said impregnated strip with the uncoated side of said gummed coated paper strip.

3. A gummed product comprising two strips of paper, one of said strips being impregnated with rubber deposited from latex, rubber deposited from an organic solvent uniting said strips of paper, said impregnated strip being embossed on its outer side, and a layer of water-soluble gum on the outer face of said non-impregnated paper strip.

FERDINAND W. HUMPHNER.