

# UNITED STATES PATENT OFFICE.

WILLIAM A. LEGGO, OF NEW YORK, N. Y., ASSIGNOR TO ELECTRO GRAPHIC MANUFACTURING COMPANY, OF SAME PLACE.

## AUTOMATIC TELEGRAPHY.

SPECIFICATION forming part of Letters Patent No. 238,930, dated March 15, 1881.

Application filed November 30, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. LEGGO, of New York, in the county of New York and State of New York, have invented a new and  
5 useful Method of Treating Blanks for Automatic Telegraphic Transmission and Reception; and I do hereby declare that the following is a full and exact description of the same.

In systems of automatic transmission, where-  
10 in the circuit is made or broken by means of a roller or stylus passing over alternate conducting and non-conducting portions of the medium upon which the message is composed for transmission, difficulty has been experienced  
15 in keeping the stylus or roller bright, smooth, and clean—requisites for successful rapid transmission. Where the receiving is done by means of electro-chemical deposition the stylus is apt to become injured, so as to be rough, by the  
20 accumulation upon it of resultants of chemical deposition.

The object of this invention is to obviate such difficulties; and to that end it consists in the method of preparing the blanks either for  
25 transmission or reception, one or both, as hereinafter set forth.

In transmission the message is properly composed by any of the ordinary methods of perforating or by the insulation of a portion of a  
30 conducting medium. When so prepared the message is coated with a lubricant, for which purpose ordinary olive or sweet oil is well adapted. For reception the paper or other ribbon, or a sheet, fillet, or cord, is first prepared  
35 with the desired chemical solution—one which decomposes under the action of the current. It is then lubricated in the same manner.

The lubricant in either case may be applied in any desired way—for instance, by brushing or sponging the lubricant upon the prepared 40 transmission or reception blank.

In practice the stylus or roller displaces the lubricant, so that the electrical connections are not affected, the lubricant at the same time serving to keep the stylus or roller bright, 45 smooth, and clean, while the roller is effectually lubricated.

In preparing transmission-blanks I have found that they may be well lubricated by waxing the paper—that is, by coating the pa- 50 per with paraffine or wax, or by inserting the paper into, or floating the paper on, a bath of melted wax or paraffine. In such case the paper should be prepared before perforation, as such treatment insures a clean cut by the 55 perforator, avoiding dust, fluff, or lint, which often, in such use of ordinary paper, seriously interfere both with proper perforation and with transmission. Linseed-oil may be used, which, drying, leaves a waxy surface upon the paper. 60

What I claim is—

As an improvement in automatic telegraphy, the method of preventing the clogging of the stylus, and of keeping the stylus bright and clean, consisting in charging the body or the 65 surface of the blank with a lubricant, substantially as set forth.

This specification signed and witnessed this 19th day of November, 1880.

W. A. LEGGO.

Witnesses:

J. HERMANN WAHLERS,  
JAMES A. PAYNE.