## 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. 238,931, 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 useful Improvement in Receiving-Mediums for Electro-Chemical Telegraphy; and I do hereby declare that the following is a full and exact description of the same.

In chemical telegraphy—that is, where the received message is recorded by the chemical decomposition or change effected at the point of a stylus by the current passing through properly-prepared paper—it is desirable that the paper be prepared with some chemical or composition of chemicals easily affected by the current and yielding a clear, distinct mark. To this end many substances and compositions have been devised and used.

I have discovered that excellent results may be attained with a silver salt; and my invention consists in combining with any suitable base capable of serving as a base or carrier of the record silver in any combination of ingredients for producing the record of electrical impulses or the passage of an electric current.

Any suitable paper in sheets, ribbons, or fillets, or sheets, ribbons, fillets, cords, or tapes of any other suitable fabric, are sensitized by immersion in or by floating upon a solution of nitrate of silver; or the solution may be applied thereto by sponging, brushing, or in any other desired and effective method. A plain solution of nitrate of silver may be used,

or there may be used in connection with the silver any other chemicals not incompatible 35 therewith for the desired purpose—such as iodine, bromine, &c. Some of these—for instance, bromides—may be used to render the paper more sensitive, others to render it less sensitive, than would be the nitrate of silver 40 by itself.

Instead of a fabric, a silver plate sensitized as in the daguerreotype process may be used to receive the record; or, further, an emulsion or collodion sensitized with silver may be used. 45

I have found that a receiving ribbon, sheet, fillet, or tape prepared, as above set forth, with silver is extremely sensitive to the action of the electric current, yielding a black mark, which, when paper is used, gives the best contrast of color, facilitating greatly the reading of the record.

What I claim is—

In telegraphy wherein the received message is recorded by electro-chemical decomposition 55 at the point of a stylus, the receiving medium for the electro-chemical record prepared with silver, substantially as and for the purposes set forth.

This specification signed and witnessed this 60 19th day of November, 1880.

W. A. LEGGO.

Witnesses:

J. HERMANN WAHLERS, JAMES A. PAYNE.