

UNITED STATES PATENT OFFICE.

FRANCIS THOMAS WRIGHT, OF EDINBURG, INDIANA.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 610,935, dated September 20, 1898.

Application filed December 21, 1897. Serial No. 662,913. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS THOMAS WRIGHT, a citizen of the United States, residing at Edinburg, in the county of Johnson and State of Indiana, have invented certain new and useful Improvements in Railroad-Ties and the Process of Manufacturing Same; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

15 This invention relates to railroad-ties and the process of manufacturing same; and it consists in the construction and association of the parts, as hereinafter fully set forth, and particularly pointed out in the claims.

20 The object of the invention is to form a railroad-tie of fine wood particles mixed with glue, resin, red ocher, and water, or other similar material, which in a plastic state is forced through a suitable former, whereby it is made to assume any desired outline. This object is attained by the parts which unite to form the product herein described, and particularly pointed out in the claims.

30 The composition of my improved tie consists of the following ingredients in the proportions stated, namely: fine wood particles, nine parts; glue, five parts; resin, four parts; and red ocher, two parts, making in all twenty parts, which are thoroughly mixed with a sufficient quantity of water to reduce the ingredients to a pulp that can be readily forced through a suitable mold or former. In the construction of this tie any suitable style of mixers and pressers may be employed, and when the parts have been thoroughly mixed to the required plastic state they are forced under hydraulic or other suitable pressure through a form having the desired outline which it is required to impart to the tie.

45 After the tie has been shaped and has become set and dried it is coated with a prepa-

ration of boiled linseed-oil and charcoal, by means of which the tie is preserved from the destructive influences of insects and the elements.

This composition may be employed for the construction of ties or other similar articles, which when made in the proportions here given and coated with the oil and charcoal paint are substantially indestructible, lasting for an indefinite length of time without becoming decomposed.

I am aware that compositions have been made and used for the purpose of constructing articles to take the place of wood; but I am not aware that all of the ingredients of my composition have ever been used together whereby the perfect results were accomplished which have been shown by the numerous experiments conducted with my invention.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The herein-described composition of matter, consisting of wood particles, or wood fiber, glue, resin, red ocher, and water, substantially as described and for the purpose specified.

2. The herein-described composition of matter for constructing railroad-ties, consisting of wood, nine parts; glue, five parts; resin, four parts; red ocher, two parts; and water to reduce the whole to a pulp, substantially as described.

3. A railroad-tie, consisting of wood fiber, glue, resin, ocher, and water formed into the required shape under hydraulic or similar pressure, and coated with boiled linseed-oil mixed with charcoal, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS THOMAS WRIGHT.

Witnesses:

E. S. CARTER,

CLAUDE LEGATE.