United States Patent Office.

CHARLES EHRLICHER, OF WATERTOWN, NEW YORK.

FIREPROOF SHEATHING.

SPECIFICATION forming part of Letters Patent No. 517,851, dated April 10, 1894.

Application filed December 14, 1893. Serial No. 493,706. (Specimens.)

To all whom it may concern:

Be it known that I, CHARLES EHRLICHER, of Watertown, in the county of Jefferson and State of New York, have invented a new and useful Improvement in Fireproof Sheathing, of which the following is a specification.

My invention relates to an improvement in fire proof sheathing, consisting of a treated mixture of talc and wood pulp pressed into sheet form for use.

In preparing the sheathing, I make a solution containing about ten per cent. each of chloride of sodium and sulphate of aluminum. In this solution I immerse wood pulp and mix 15 it thoroughly with the solution and then add tale, thoroughly mixing the tale with the wood pulp in the solution. The wood pulp and talc are introduced into the solution in the proportion of about twenty-five pounds of so wood pulp to one hundred pounds of talc. The mixture of wood pulp and talc, treated with the solution of chloride of sodium and sulphate of aluminum, is then pressed into shape in the ordinary manner of paper mak-25 ing and during the calendering process, the sheet is treated with a fire protecting sizing, consisting of a weak solution of soluble glass. The weak solution of soluble glass is conveniently sprayed onto the sheet of sheathing 30 as it is about to enter between the calender- |

ing rollers and clings to the fibers of the wood pulp in the mixture, forming a protecting covering for them. The proportions of salt and alum in solution may be varied somewhat from those here given and the proportions of wood pulp to that of tale may also be other than that mentioned, without departing from the spirit and scope of my invention; the exact proportions to produce the best results depending somewhat upon the quality 4c of the materials employed and the particular uses to which the sheathing is to be put. The proportions herein set forth have produced excellent results.

What I claim is—

1. The process of making a fireproof sheathing, consisting in first forming a solution of salt and alum, then thoroughly incorporating therewith wood pulp, then mixing fibrous tale with the treated wood pulp and finally 50 forming the mass into a flexible sheet, substantially as set forth.

2. The flexible sheet of sheathing composed of fibrous talc and wood pulp in the proportions substantially as set forth.

CHARLES EHRLICHER.

Witnesses:

FREDK. HAYNES, IRENE B. DECKER.