

UNITED STATES PATENT OFFICE.

RUDOLF TÁNCZOS, OF VIENNA, AUSTRIA-HUNGARY.

FIREPROOFING WOOD.

SPECIFICATION forming part of Letters Patent No. 329,973, dated November 10, 1885.

Application filed August 13, 1885. Serial No. 174,331. (No specimens.) Patented in Belgium July 4, 1885, No. 69,491, and in Italy August 5, 1885, XIX, 18,626, and XXXVII, 39.

To all whom it may concern:

Be it known that I, RUDOLF TÁNCZOS, a subject of the Emperor of Austria-Hungary, residing at Vienna, in the Province of Lower Austria, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in Fireproof Impregnating Material; 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.

This invention relates to a process of rendering wood or like fibrous substances combustible; and in carrying out this process I proceed as follows: About four parts, by weight, of borax, (biborate of soda,) and about three parts, by weight, of bitter-salt (sulphate of magnesia) are dissolved in about twenty parts of hot water, and in the solution thus prepared the wood or like substance, which has been thoroughly dried, is immersed for a sufficient length of time to enable the wood to be thoroughly impregnated with the solution. The impregnated wood is then removed from the solution, and is coated with a mixture of washed clay and a sufficient quantity of liquid water-glass (by preference soda water-glass) to enable the mass to be applied by means of a brush. The wood, after being allowed to dry, is enveloped in a paper or woven-fabric sheath. If a woven fabric is used, I prefer to use a coarselinen fabric. The paper or fabric before being placed around the wood

is impregnated with the solution of borax and bitter-salt, heretofore mentioned.

As a final step of the process, the impregnated wood and its like sheathing is coated with a mixture of from thirty to forty parts, by weight, of sulphate of ammonia, and from thirty-five to forty-five parts, by weight, of gypsum (hydrated sulphate of lime) diluted with a sufficient quantity of water to allow of the mass being conveniently applied.

When treated in the described manner, the wood is particularly adapted for use as a filling for safes, and for other purposes where a fire-proof material is required or desirable.

What I claim is—

The herein-described process of rendering wood or other like fibrous substances combustible, which consists in impregnating the dried material with a warm aqueous solution of borax and bitter-salt, (magnesium sulphate,) drying the same, coating the same with a mixture of washed clay and water-glass, after which the material is sheathed with paper or a woven fabric previously impregnated with the described solution of borax and bitter-salt, and then applying to the sheathed material a solution of sulphate of ammonia, gypsum, and water.

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

RUDOLF TÁNCZOS.

Witnesses:

ADOLF TISCHLER,
SAMUEL WERTHEIM, Jr.