

UNITED STATES PATENT OFFICE.

GIUSEPPE ANTONIO MESTURINO, OF TURIN, ITALY.

COMPOSITION OF MATTER FOR FIREPROOFING AND OTHER PURPOSES.

1,030,909.

Specification of Letters Patent.

Patented July 2, 1912.

No Drawing.

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To all whom it may concern:

Be it known that I, GIUSEPPE ANTONIO MESTURINO, a subject of the King of Italy, residing at Turin, Italy, have invented certain new and useful Improvements in Composition of Matter for Fireproofing and other Purposes, of which the following is a specification.

This invention relates to a composition of matter for fire-proofing and impregnating such material as fabrics of artificial silk and other vegetable or animal fibers, paper articles, or the like, without affecting the softness, resistance, and color of the goods treated.

In addition to its fire-proofing properties, the composition of the present invention possesses other valuable properties, as a result of which the fabric or other material treated is given new and desirable properties and its stability and durability are materially increased.

The following is a specific example of the composition according to the present invention, the ingredients being indicated in the amounts which have been found to give particularly advantageous results:

	Water	105	parts
30	Ammonium phosphate	7	"
	Ammonium sulfate	7.5	"
	Ammonium carbonate	2.5	"
	Boric acid	3	"
	Dextrin	0.3	"
35	Aluminium hydroxid	3	"

The dextrin added increases the homogeneity of the mixture, while the presence of the inorganic salts not only serves for fire-proofing purposes but also to render the dextrin free from its hygroscopic, putrefactive and other objectionable properties. The dextrin, moreover makes the composition more valuable for use with fabrics which are to be dyed or otherwise subjected to chemical treatment.

The aluminium hydroxid has valuable fire-proofing and water-proofing properties, protecting the fabrics from deterioration when exposed to the atmosphere, and hence materially increasing the durability of the fabric.

The content of aluminium hydroxid may be varied or increased when heavier fabrics or thicker fibers or fabrics are to be impregnated.

In the case of thin paper articles it is advantageous to add to the mixture a small quantity of gum, in order to impart the desired consistency to the paper.

In using the composition of the present invention the articles are immersed or kept in the bath for 20-40 minutes and then removed and dried by exposure to the air or in a drying apparatus, or by other suitable means.

The composition of the present invention is free from any of the disadvantages of known compositions containing the individual ingredients indicated; and in addition it possesses valuable properties not possessed by the individual constituents from which made up.

The proportions of the ingredients indicated may be somewhat varied but the formula given has been found to give excellent results.

I claim:

1. A composition of matter comprising ammonium sulfate, ammonium carbonate, boric acid, ammonium phosphate, dextrin and aluminium hydroxid, substantially as described.

2. A composition of matter for fire-proofing and other purposes comprising the following ingredients in substantially the following proportions:

	Ammonium phosphate	7	parts
	Ammonium sulfate	7.5	"
	Ammonium carbonate	2.5	"
	Boric acid	3	"
	Dextrin	0.3	"
	Aluminium hydroxid	3	"

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

GIUSEPPE ANTONIO MESTURINO.

Witnesses:

CARLO TORBAY,
GOCÉLYN GOUBEYRAN.