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METHOD OF AND MACHINE FOR THE MANUFACTURE OF CONTINUOUS SHEETS OF ASBESTOS CEMENT REENFORCED WITH WIRE NETTING

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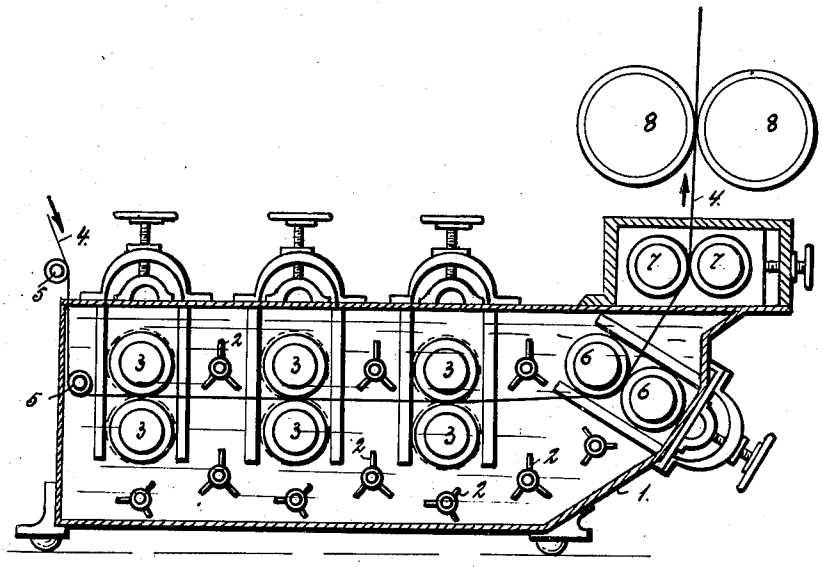



Fig. 1.

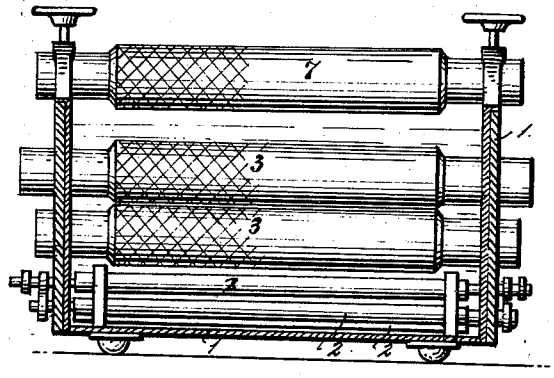



Fig. 2.

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## METHOD OF AND MACHINE FOR THE MANUFACTURE OF CONTINUOUS SHEETS OF ASBESTOS CEMENT REENFORCED WITH WIRE NETTING

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2 Claims. (Cl. 92—70)

A process for the manufacture of continuous plain and corrugated sheets of asbestos cement with reenforcement of iron wire netting is known, consisting in the mixing of cement and asbestos in a certain proportion, together with water and coloring matter, to a thick paste, applying this paste to both sides of an iron wire netting, pressing the paste and netting a plurality of times by water permeable means to force the paste against, through and around the meshes of the iron netting to remove the excess water, rolling the sheet to the desired thickness, drying the sheet to nearly complete dryness, corrugating the sheets by first rolling two corrugations into the middle of a sheet and then continuing rolling other corrugations on either side of the middle of the sheet in such a manner that the plate is corrugated progressively throughout its whole length, and finally cutting the sheets into desired lengths.

In this known process, the reenforcing sheet with the mixture of asbestos cement is passed through the rolls downwards, in such a manner that a large quantity of water is carried through the pressing rolls and consequently it is rather difficult to obtain the desired thickness together with the exact degree of wetness.

According to the present invention the reenforcing sheet with the mixture of cement and asbestos is moved upwards to and through the rolls posterior to the paste applying rolls, so that even before the sheet with the mixture of asbestos cement passes through the pressing and smoothing rollers, a large quantity of water will be removed.

For this purpose, the casing containing asbestos cement is located under the press rollers. The reenforcing sheet is passed through said casing between a plurality of pairs of horizontal rolls, arranged one behind the other, said rolls being under the mixture level. Before the reenforcing sheet with the asbestos cement passes to the pressing and smoothing rollers, excess water is separated from the asbestos cement, partly by its own gravity and partly by the action of guide rolls.

For the purpose of explaining the process according to the invention more clearly, reference is made to the accompanying drawing in which:

Fig. 1 is a diagrammatic sectional elevation of a machine suitable for carrying out the improved process, and

Fig. 2 is a vertical cross section of the apparatus shown in Fig. 1.

The asbestos cement mixture is contained in a casing 1 provided with agitators 2. The casing is provided with two or more pairs of horizontal rolls 3, arranged one behind the other, the shells of said rollers being of wire netting. The rollers 3 are mounted in such a manner that either both or one of the two rollers of each pair of rolls may be moved to adjust the distance between the shells, and means may be provided to adjust the distances in connection with all the pairs simultaneously and during working.

The reenforcing sheet 4 passes over guide rollers 5 and then between the pairs of rolls 3, said rolls 3 being entirely coated with the mixture of asbestos cement.

All these pairs of rollers 3, 3 force a layer of the mixture of asbestos cement upon and against the reenforcing sheet 4. The sheet then passes through a pair of press rollers 6 and through the rollers 7 to the main press rollers 8. It will be seen that from the point of delivery of the rollers 3, 3 the sheet moves in an upward direction.

If it be desired to manufacture two- or multiply sheets of asbestos cement a second like machine may be placed on the other side of the main press rollers 8, and the rollers 8, 8 may be used to combine two continuous sheets to one unit.

In case several sheets are to be united, it will be obvious that two or more pairs of feeding rollers, for instance, one above the other, are to be provided.

I claim:

1. A method of making continuous sheets of asbestos cement reenforced with iron wire netting consisting in passing wire netting through a casing containing asbestos cement in a substantially horizontal direction through a plurality of pasting rollers having shells constructed of wire netting and subsequently passing the pasted sheet in an upward direction to and through pressing rollers substantially as described.

2. A method of making continuous sheets of asbestos cement reenforced with iron wire netting, comprising in steps: passing iron wire netting through a casing containing asbestos ce-


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ment in a substantially horizontal direction successively between pairs of pasting rollers having shells constructed of wire netting, whereby a reenforced sheet of asbestos cement is formed in the casing; passing said sheet between a pair of pressing rollers having shells constructed of wire netting; passing said sheet between a further pair of rollers; and then passing said sheet in a substantially vertical direction between another pair of pressing rollers having shells constructed of wire netting, substantially as described.

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