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AMERICAN IMITATIONS OF SPRAYED "LIMPET"
ASBESTOS

Sprayed "Limpet" Asbestos was first produced as a means of insulating steel railway cars at a time when the Railways and builders were changing from wood to steel construction - that is, in the late 1920's - and we covered the process by world patents.

In the United States under Patents Nos. 1,990,584/5, S.L.A. was largely absorbed in the acoustical field, but during the early stages of the last war it was nearly all going into marine insulation. Because of this, those of our licensees who had established themselves in the acoustical field were deprived of fibre, and as most of them were one-man businesses, they started looking out for alternatives in the way of fibre.

Up to that time there were no other blown-on insulation processes in the United States other than Sprayed-Flake, which uses ground-up paper waste for cheap building insulation. On the other hand, the blowing of rock wool in the dry state for filling the usual type of American cavity wall construction, was in common use, and it was not unnatural for our licensees to try and substitute asbestos fibre for "blowing wool" (as this particular grade of rock wool is commonly described)

Attempts to spray this material through our standard machines were not successful, so that some of our early imitators did their best to find alternative sources of asbestos fibre by grinding up old brake lining and other waste, sometimes mixing this with short Canadian fibre, but as this produces dense coatings its efficiency is poor, though one user persisted in spraying this in preference to rock wool.

American spray business is mainly confined to low-class acoustical coatings, and has made little progress; the quality of the work is such that no reputable architects will accept it.

Efforts to enter the building insulation field have likewise been on a small scale because, following early experience, most of the U.S. Government Departments have excluded such forms of insulation from their specifications, and it is becoming well known that rock wool is not only



unsuitable for spraying, but has many serious faults, principally derived from its lack of cohesion and its high "shot" or grit content - normally around 60% - which makes it dangerous to use in the vicinity of machinery, including mechanical calculators, telephones, etc.

One of our largest war-time customers, the National Gypsum Company of Buffalo, N.Y., are amongst the biggest producers of rock wool in the States, and at a time when we were unable to provide them with sufficient fibre they attempted to make up a special spraying mixture known as "Thermacoust", but have since largely discontinued this.

Most of our imitators' activity has been confined to the region between New York and Philadelphia, where there is a demand for cheap acoustical treatment in cafeterias and other "dives", and the main concern is the "textured" ceiling in a dark colour that fits in with the usual dim concealed lighting effect.

Several of our original imitators have attempted to profit from their knowledge of the business by letting out machines and selling "fibre" to those who have been granted their "franchise" - usually small tradesmen with some knowledge of plastering.

It is not surprising, therefore, that our American imitators are on the lookout for new business in those fields where J.L.A. is popular, and in order to profit from those who think they can get rich quick. This has been largely forced upon them because their American customers now realise that they can buy rock wool directly from the manufacturers, and as a result the number of small independent firms offering blown-on insulation is steadily increasing, to the detriment of the trade as a whole.

One of the first of our imitators, Mr. J.L. Kempthorne of Sprayed Insulation Inc., at Newark, N.J., professed to have been the father of this business, yet he has recently been adjudicated bankrupt for the second time.

The best known firm applying rock wool mixtures in the New York area is New York Art Crafts, whose principal, Mr. R. Cathcart, is an expert decorator, and was formerly one of our own applicators. Recently he has been operating the Asbestospray process, but is by no means satisfied with his lot as he finds it impossible to cater for reputable architects who require a relatively smooth clean finish.

Asbestospray's American distributors realise that the composition of their fibre is largely rock wool with a small proportion of cheap asbestos, mixed with clay to hold it together. Within recent months the machine used to apply this mixture (which formerly consisted of a rotating drum underneath a hopper that rolled the fibre into the fan of the machine in a more or less unregulated amount), has been changed for a machine that has been used in other parts of the world, embodying one of the principles of the J.W. blower; that is, it has a pair of rotating arms that agitate the fibre in a hopper which leads to an Archimedean screw that discharges the fibre into the fan - which idea is again taken from an American machine for blowing plaster, and is obviously only suited for short crumbly and heavy fibre resembling sand.

The gun is a coarse imitation of our own, being very much heavier and clumsier, and claims for high rates of coverage are based on the crudest form of application with no finish and a resulting cloud of dust and fibre throughout the neighbourhood of the operation.

The usual selling price in the New York area for this type of work is around 27c. per sq.ft. $\frac{1}{2}$ " thick.

^{re} The introduction of our process into the United States, now that the fibre situation is normal, has been made difficult owing to the bad name that such imitations have built up for it in the meantime.

It will be obvious from all this that those who are now offering blown-on insulation in competition with us have no experience or fundamental knowledge of the trade; their technical service is non-existent, and such advertising as is put out by them can be shown to be based entirely on our own literature, except where they attempt to give reasons why. Their laboratory test reports are questionable as the same figures are quoted for thermal conductivity irrespective of density or temperature range; their sound absorption figures are based on American methods of testing that are much more flattering than N.P.L. figures, and the fire-resistance figures, when based on American Underwriters' tests, are a measure of the design of the fireproof construction, and not of the material as such.

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