

To those afflicted with cold feet a stocking or insole of asbestos cloth, which is easily made, is a sure preventive of discomfort. This article has already been manufactured by an enterprising firm and a patent taken out thereon, while a thin strip, used as a cork sole, will be found highly efficacious in keeping one's feet comfortable. While, however, the uses to which this peculiar mineral appears to be adapted are manifold, possibly the most important and valuable is that to which it is now so generally applied, viz., as packings for cylinder pistons in steam engines, and for joints in gas, steam and hot air pipes. In the manufacturing of steam packing good fibre is required capable of spinning. The mineral as it comes out of the rock in vein form is first pulled apart and the fibre teased out into a woolly or silky mass. Then, by specially prepared machinery, the gritty and iron particles are carefully eliminated, since their presence would be productive of injury to the rapidly moving polished piston rods, and the resulting product, a fine fluffy substance, is then carded and spun into yarn or woven into cloth. If the former, the yarn is treated after the manner of manilla and manufactured into ropes of various sizes and shapes, as required for the different varieties of packing into which it is to be made. In order to adapt the mineral to special uses the fibres of the asbestos are frequently intermixed with fine wires of copper or brass or associated with rubber. In some varieties also finely divided graphite enters into the composition, presumably to impart greater lubricity to the material. The great value of this packing arises from the fact that it is unacted upon by steam or heat, and consequently retains its elastic properties for a very long time in comparison with the old style of hemp or rubber packings; so that now, especially since the late improvements in engines of the marine type where enormous power is developed, such satisfactory results could not probably be obtained by any other known substance.

As a covering for steam pipes and boilers it has also come into very general use, the saving in fuel and power from its application far more than repaying the cost of the material, and is estimated to be not less than 30 per cent. of the energy developed.

But it would be practically impossible in a paper of this kind to enumerate the uses to which this wonderful material is now being ap-