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FRICTION PADDING MATERIAL

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3 Claims. (Cl. 154—43)

This invention relates to resilient padding material characterized by a high surface coefficient of friction on one side and sometimes, but not always, by adhesiveness on the opposite side and it consists of a felt or feltlike fabric having one surface so treated as to coat the surface fibers with a light deposit of rubber derived from a freely fluid solution or aqueous dispersion thereof and thereafter vulcanized in place and, if desired, having the opposed surface so treated as to coat the surface fibers with a deposit of rubber and a softener therefor derived from a freely fluid solution or aqueous dispersion thereof, all as more fully and hereinafter described.

Felt is commonly used as a padding for objects which rest upon or are moved about on such polished surfaces as those of office furniture and the like. The common telephone desk set represents an object of a movable type which is usually padded with felt or a like fabric. Plate glass desk tops represent a type of stationary object which is commonly held out of contact with its supporting polished surface by means of felt or other padding. In this instance, the padding is usually restricted to a narrow strip at or close to the outer edges. The telephone desk set above mentioned and more particularly telephone desk sets of the dial type tend to slip or slide on polished surfaces when provided with the usual base padding of felt. While, in this instance, the felt admirably functions to prevent marring of polished surfaces with which it contacts, the felt has a very low coefficient of friction and does not materially assist in holding the instrument in place when the latter is in use and particularly does not offer adequate resistance to the lateral thrust of the operator's fingers when the dial is being manipulated.

I am aware that heretofore attempts have been made to increase the coefficient of friction of the usual telephone base, but whenever a substantial increase in coefficient of friction has been achieved, it has been found that the accompanying strain on the felt results in a progressive stretch of the latter. It is obvious that to be satisfactory in service, not only from the standpoint of sightliness but from that of utility as well, the fabric pad must be tight to the metal base of the instrument itself. Because of the construction of the usual instrument the above mentioned objectionable stretch may not be obviated by such obvious expedients as gluing the felt to the metal, since the felt base is preferably susceptible of ready removal or replacement, etc.

It is an object of this invention to provide a non-marring pad for movable objects, particularly telephone desk sets, which shall have a high coefficient of friction and yet remain tight to the base of the object in service.

I have discovered that fabrics and particularly certain punched felts, e. g., feltlike fabrics composed of a woven core through which felting fibers have been threaded by a punching operation, are structurally suited to resist the forces tending to distort them when subjected to frictional strain. Fabrics and these punched felts are, as non-marring pads, fully as satisfactory as ordinary felt of the same compactibility, as they retain their cushioning resiliency.

In the practice of this invention I apply rubber and compounding ingredients preferably in an aqueous dispersion and usually in the form of a spray to the surface fibers of one side of a felt or feltlike fabric preferably of the punched type. I then dry to remove the water of the dispersion (or solvent if such has been used) and deposit the rubber and compound upon the surface fibers and then subject the so-treated fabric to a sufficiently elevated temperature to effect vulcanization of the rubber. Preferably I avoid such compacting pressure as would impair the open texture of the fiber surface and thus obtain a surface in which the fibers are more or less individually coated with rubber while still in normally spaced relationship.

The following is a suitable compound for the purposes of this invention when applied in such amount as to yield about one ounce per square yard when dry:

	Per cent
Rubber latex solids	13.00
Ammonia	0.20
Antioxidant "Stabilite"	0.26
Accelerator (diphenyl guanidine)	0.26
Sulfur	0.26
Zinc oxide	0.52
Glue	0.70
Dispersing agent "Darvan"	0.03
Coloring pigments	0.90

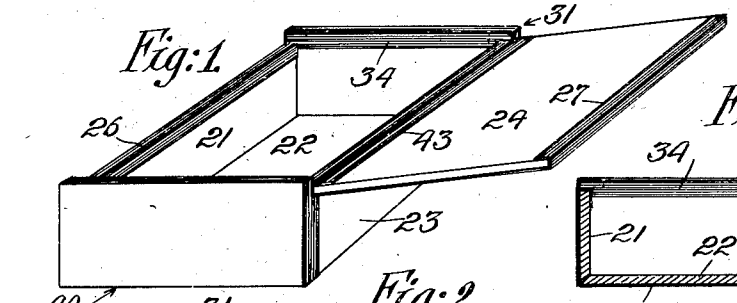
It will be clear to those skilled in the art that this illustrative formula may be modified without departing from the scope of the invention. I have found, however, that both as to the coefficient of friction and the resistance to oxidation or "ageing" the above formula represents a substantially optimum ratio for the several ingredients.

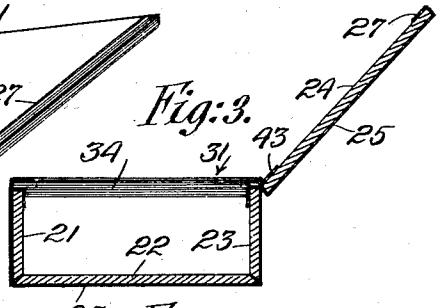
Figure 1 of the drawing shows my invention in magnified cross-section 10 indicates the sup-

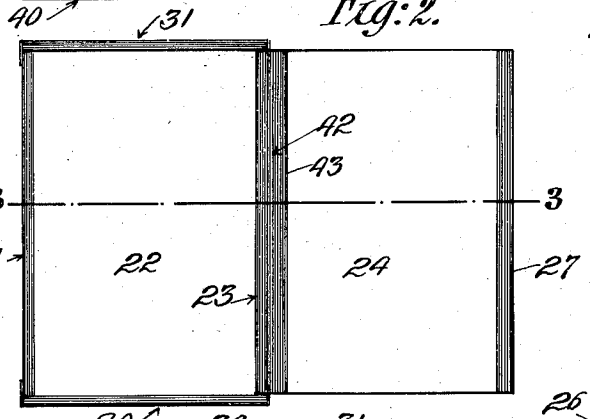
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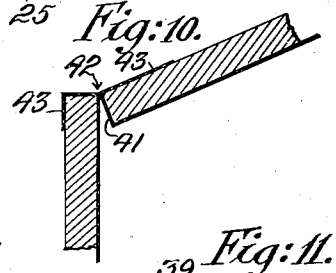
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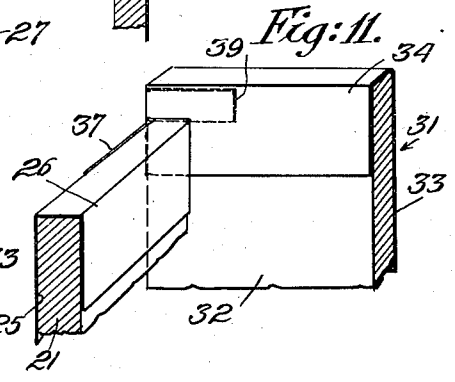
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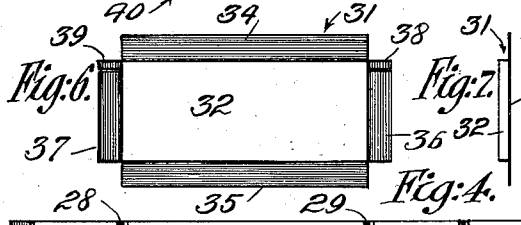


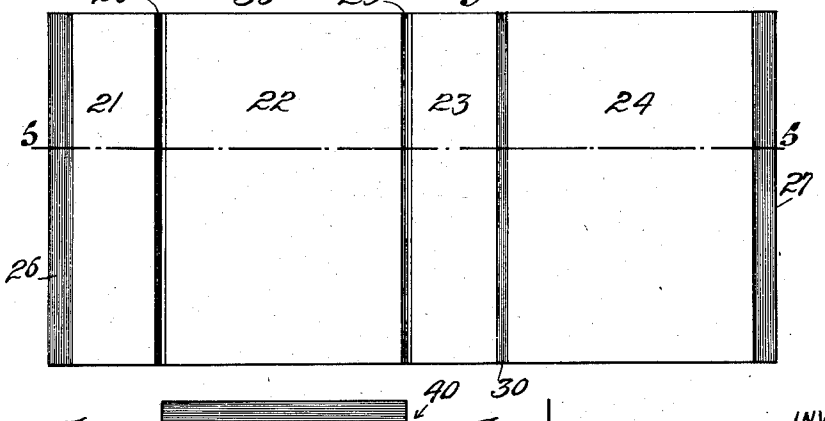


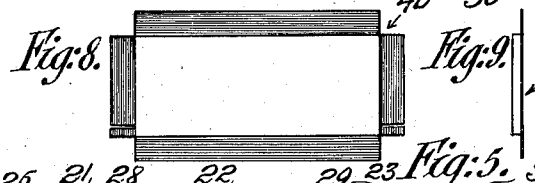


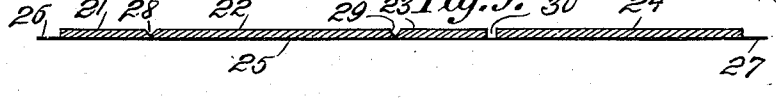












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