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PAPER ARMATURE SLOT PEG

Original Filed Dec. 26, 1940

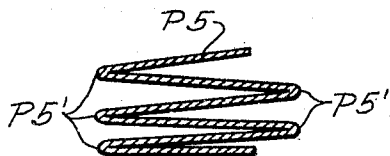


Fig. 1.

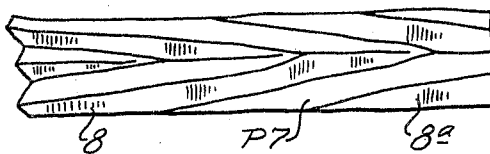


Fig. 2.



Fig. 3.

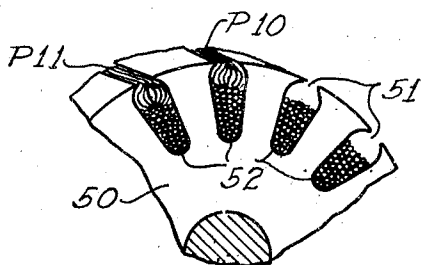


Fig. 5.



Fig. 4.



Fig. 6.

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PAPER ARMATURE SLOT PEG

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4 Claims. (Cl. 171—206)

The object of my invention is to form an armature slot closing peg preferably of cheap material, as paper, and to so form it that when it is driven into a slot it will have a pronounced tendency to spread, bow-leg, or rivet out under the slot tooth overhang, thereby thoroughly locking the said peg in the slot.

My preferred form is one in which the paper is primarily folded longitudinally and secondarily folded transversely.

This application was divided out of my application No. 371,733 filed December 26, 1940, and should be considered in connection therewith.

In the drawing Fig. 1 is an expanded section of the paper used to form the pegs after receiving the primary fold.

Fig. 2 is an expanded plan of the pegging paper after it has received its secondary fold showing the preferred random herringbone pattern of this secondary fold.

Fig. 3 is a section of the said paper peg showing the random character of the said herringbone fold.

Fig. 4 is a similar section taken at another point which when compared with Fig. 3 shows more clearly the random characteristics of the secondary fold.

Fig. 5 is a cross section of a conventional slotted armature with a couple of my paper slot pegs driven into a pair of slots, demonstrating how said pegs rivet under the armature tooth overhang.

Fig. 6 is an expanded section of one of my paper slot pegs having the random secondary fold only.

Per current practice, I shall use the term "armature slots," or, for short, "slots," to indicate such slots whether in rotors, stators, armatures, or fields, and the common name "slot pegs," or "pegs," to designate the material for closing said slots. The term "paper" will be used to include any sheet foldable material usable by or in my method of forming slot pegs. Materials of many kinds and thicknesses can be used. Ordinarily I prefer common strong wrapping paper and will describe my invention therewith.

It is convenient to use roll paper for making my pegs and to multiply fold it somewhat longitudinally, preferably applying a zigzag fold as shown in section Fig. 1. It may be used for pegs in this condition. It, however, makes a better peg if given a secondary proximately longitudinal zigzag fold. But if both folds are snug and symmetrical the peg will frequently fail to spread, rivet, or mushroom out under the teeth of the armature when driven home. If,

however, the secondary zigzag fold is of a random pattern, preferably of a herringbone pattern, as shown in Fig. 2 and in two sectional views 3 and 4, the pegs will rivet under the teeth with decided fidelity as shown in Fig. 5 at P10 and P11. For the purpose of illustration, these zigzag folds are shown open in Figs. 1, 2, 3, 4 and 6. Actually in use they are crushed or closed tightly together. When so crushed said herringbone folds will be substantially longitudinal.

I use the term "longitudinal" broadly to include folds that depart from longitudinally, as said herringbone fold, but not for twists or twisted structures, as string or rope.

It is not necessary that random folds in my slot pegs be of a herringbone pattern. Many random patterns will accomplish the ends desired. I use the herringbone pattern first because it rivets under the slot teeth well and second because of the extreme simplicity of the mechanism required to make it.

In Fig. 5 a pair of armature slot pegs P10 of the above type are shown in the slots 50 and 51 of a conventional armature where it will be noted how they bow-leg or rivet out under the overhang of the armature teeth after being driven home into the slot on top of the wire 52. When so riveted my paper peg will hold the wire as securely in the slot as if it were a solid piece of wood, and when varnished much more securely.

Under some conditions, as very small slots, or the use of thick paper, it becomes best to dispense with the primary fold and fold the paper only with what I have designated the secondary random herringbone folds, shown in section in Fig. 6.

Having now described my invention I claim:

1. Armature slot pegging material consisting of paper zigzag folded longitudinally the length of the peg.
2. Armature slot pegging material consisting of paper multiply folded longitudinally the length of the peg with a secondary transverse longitudinal fold.
3. Armature slot pegging material consisting of paper multiply folded longitudinally the length of the peg with a secondary transverse longitudinal fold said secondary fold being of a multiple random pattern.
4. Armature slot pegging material consisting of paper multiply folded longitudinally the length of the peg with a secondary transverse longitudinal fold said secondary fold being of a multiple random herringbone pattern.

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