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BLOCK FOR USE IN DIEING OUT AND SIMILAR MACHINES

Frederick R. Woodward, Newton, Mass.; Edith B. Woodward and William F. Bacon, Newton, Mass., executors of said Frederick R. Woodward, deceased

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7 Claims. (Cl. 164—78)

The principal purpose of my invention is to provide a block for dieing out machines, or clicking machines, or beam die cutters, or similar machines in which a cutting member acts on material which is usually supported by a plurality of such blocks. Heretofore the blocks have been made of wood as disclosed for example in the patent to Shea No. 1,513,938 dated November 4, 1924, and these blocks, unless covered by a slab of some sort, would be cut into and soon become uneven and unfit for use, especially for fine work. I construct the blocks themselves of such material that they will resist the cutting action of the cutting member and I thus do away with the necessity of any slab or other covering member. The wooden blocks chip and powder off and have to be planed off very frequently to make their surface smooth with the result that the blocks have ultimately to be replaced. With my invention I do away with the use of any covering slab for the blocks and this is because I make my blocks, preferably resting on end, of material which will resist the cutting action of the cutting member and consequently I save the expense of a covering slab and the expense of frequent planing or smoothing of the wooden blocks and the expense of replacing the wooden blocks. My blocks are slightly resilient and are self-healing, that is to say, my material, after being slightly displaced by the cutting member will, on account of its nature, tend to resume its normal condition and the surface of the block will automatically tend to become, and remain, smooth with the result that extremely infrequent smoothing will keep the surface of the block in perfect condition for use.

My block is a homogeneous mass comprising, preferably, about 75% of a vegetable product, preferably sulphite pulp, which is a pulp commonly made from wood or other vegetable product by the action of sulphur or a sulphur compound, the rest of said mass consisting of a more or less resilient binder such as, rubber compound, rubber cement, rubber latex or resin, preferably an oily resin. I mix the parts, just referred to, preferably with an accelerator to aid vulcanizing. When the ingredients have been mixed so as to become a thoroughly homogeneous mass, the latter is preferably pressed under hydraulic pressure until it is of the desired density and then vulcanized to the desired hardness, this hardness being such as to furnish proper resistance to the cutting member.

If it is desired to use a plurality of my blocks they may be held together in any suitable way as by an encircling band such as appears in said Shea patent.

What I claim is:

1. A block having a portion to be engaged by the cutting member of a machine of the character described, said portion comprising a homogeneous mass of short individualized fibres of vegetable material thoroughly commingled with and united by a binder of resilient material.

2. A block having a portion to be engaged by the cutting member of a machine of the character described, said portion comprising a homogeneous compacted mass of short individualized fibres of vegetable material thoroughly commingled with and united by a resilient binder of vulcanized material

3. A block having a portion to be engaged by the cutting member of a machine of the character described, said portion being a homogeneous mass consisting of substantially 75% of sulphite pulp and substantially 25% of a resilient binder for said pulp.

4. A block having a portion to be engaged by the cutting member of a machine of the character described, said portion being a homogeneous mass of wood pulp and rubber compound.

5. A block having a portion to be engaged by the cutting member of a machine of the character described, said portion being a homogeneous mass of wood pulp and rubber latex.

6. A block having a portion to be engaged by the cutting member of a machine of the character described, said portion being a homogeneous mass of wood pulp and resin.

7. A block for dieing out machines being a homogeneous mass consisting of substantially 75% of sulphite pulp and substantially 25% of rubber latex.

FREDERICK R. WOODWARD.