

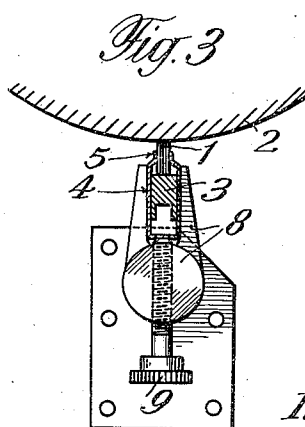
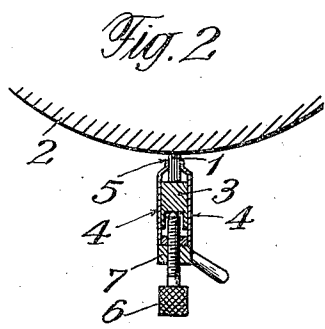
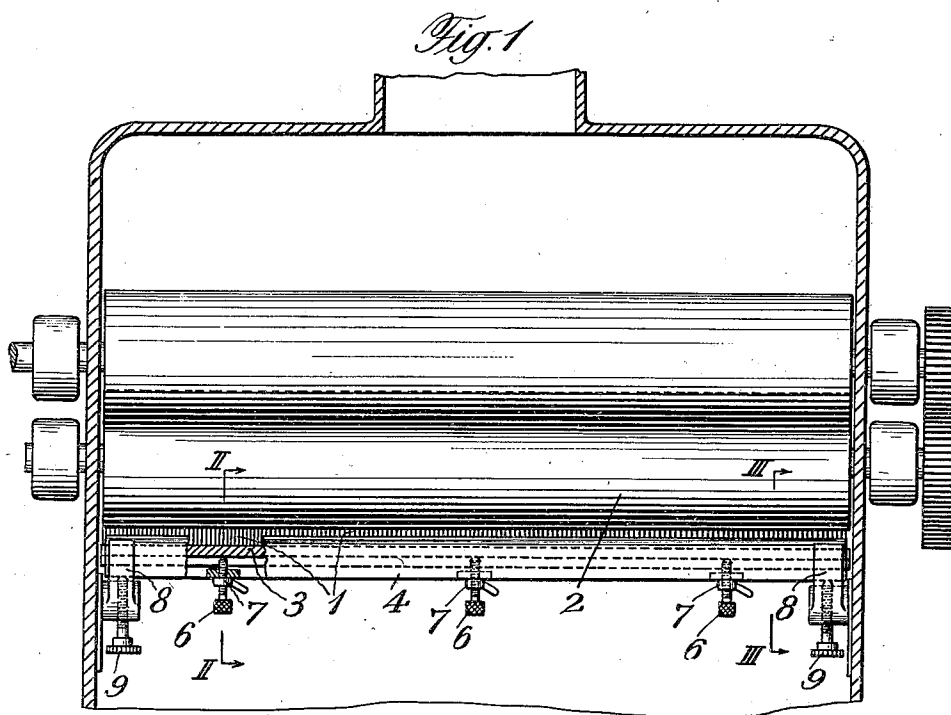
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ROLLER BRUSH FOR ROLLER MILLS

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UNITED STATES PATENT OFFICE

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ROLLER BRUSH FOR ROLLER MILLS

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1 Claim. (Cl. 83—12)

This invention relates to roller brushes for roller mills.

In roller mills for cereals, it is customary to apply roller wiping devices including brushes, apart from the so-called scraper blades. Depending upon the material to be ground the known roller brushes operate satisfactorily or else entirely unsatisfactorily. An unsatisfactory operation results in cases where the material to be ground is of such nature as to resist the cleaning of the rollers. This is encountered so to speak in all mills since the nature of the material to be ground during the various passes varies to a considerable extent, particularly in automatic mills.

It is natural that for cleaning the rollers after the grinding of different materials brushes of different resistivity should be used since in many cases a soft brush answers the purpose, whereas for materials which render the cleaning of the rollers difficult relatively stiff brushes must be applied, in order to ensure that the rollers are reliably cleaned.

If these requirements are not satisfied, the rollers begin, so to speak, to wind the material thereabout so that the grinding operation is greatly impaired.

In order to eliminate these drawbacks, according to the present invention, means for adjusting the brush during the operation of the roller mill are provided by effect of which the resistance to be opposed by the brush when cleaning is regulated.

Advantageously, an open-ended brush carrier is provided the edges of the opening of which resiliently hold the bristles of the brush together and, the brush is displaceably arranged so that the bristles project beyond the end of the brush carrier more or less. The arrangement may be such that the brush carrier can be pressed on the roller, for example, by means of adjusting screws together with the brush.

In the accompanying drawing an embodiment of the invention is illustrated by way of example only, in which

Fig. 1 shows a side elevation of a roller brush according to the invention;

Fig. 2 is a cross section on the line II—II of Fig. 1, and

Fig. 3 is a cross section on the line III—III of Fig. 1.

The bristles 1 of the roller brush serving for

cleaning the grinding roller 2 are secured in a brush backing member 3 which is displaceably arranged in a brush carrier 4. The end of the brush carrier 4 facing the grinding roller 2 is open for receiving the bristles 1 and is provided with springily resilient edges 5 by means of which the bristles are held together. The brush carrier 4 is threadedly engaged by adjusting screws 6, the ends of which engage the brush backing member 3 and by means of which the backing member can be so displaced together with the bristles 1 that the latter project beyond the edges 5 more or less, so that the brush is given a correspondingly smaller or greater stiffness, that is, opposes a smaller or greater resistance when cleaning.

Th adjusting screws 6 can be secured in their positions of adjustment by lock nuts 7. The brush carrier 4 is supported at both ends by supporting members 8, so that the carrier can be moved into bearing engagement, that is, pressed on the grinding roller by means of the brush 1, 3 with the aid of adjusting screws 9 screwed into the supporting members 8. During shifting of the brush backing member 3 relative to the brush carrier 4, by means of the screws 6 for regulating the resistivity of the bristles 1, the brush carrier 4 must be readjusted at the same time by means of the adjusting screws 9.

I do not limit myself to the particular size, shape, number or arrangement of parts as shown and described, all of which may be varied without going beyond the scope of my invention as shown, described and claimed.

What I claim is:

In a roller brush for roller mills, a grinding roller, a bristled brush for cleaning said roller by regulatable bearing engagement therewith, an adjustable open-ended brush carrier, springily resilient edges bordering the opening of said carrier for clampingly holding the bristles of said brush, means for shifting said bristles during the operation of the mill relative to said edges to project therefrom to an extent as required for setting the amount of resistance to be opposed by said brush when cleaning said roller during the grinding of a material of a certain nature, and means for adjusting the bearing engagement between said brush and said roller in adaptation to the nature of the material being ground.

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