

May 7, 1929.

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1,712,294

STATIC ABSORBER

Filed Aug. 1, 1927

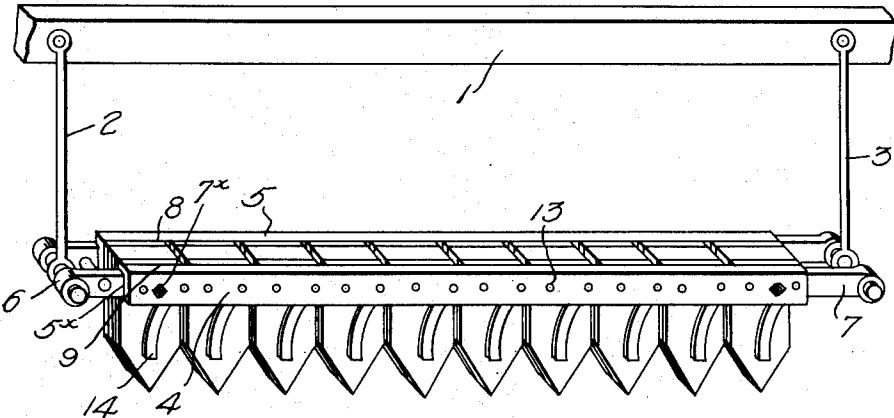


Fig. 1

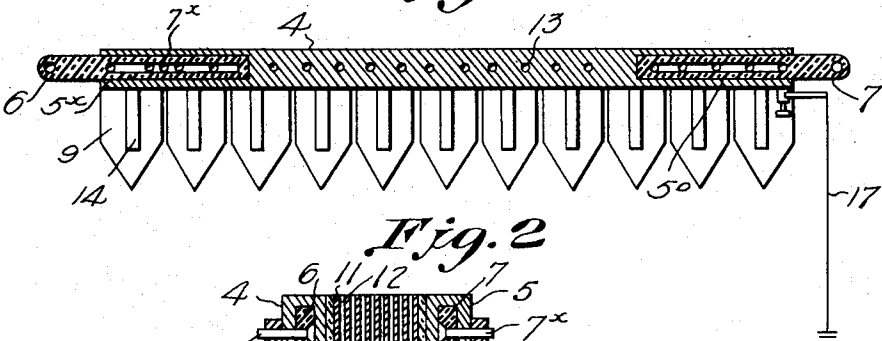


Fig. 2

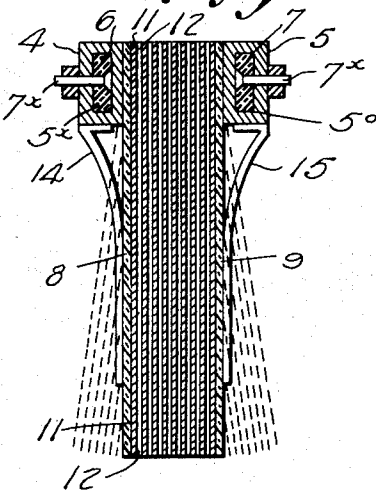


Fig. 3

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STATIC ABSORBER.

Application filed August 1, 1927. Serial No. 209,999.

My invention relates to improvements in static absorbers, and the object of the invention is to devise a simple, cheap device which will efficiently absorb all static charges in the moving parts of a machine, which will operate without expense and can be readily applied, which will eliminate the noise produced by the static charges and the danger of fire and the labour and expense of an attendant to put out any fire tending to be produced, and it consists essentially of the arrangement and construction of parts as hereinafter more particularly explained.

Fig. 1 is a perspective view of my absorber.
 Fig. 2 is a longitudinal sectional view through one of the holding bars supporting the absorbing elements.

Fig. 3 is an enlarged transverse sectional view through my absorber.

In the drawing like characters of reference indicate corresponding parts in each figure.

1 indicates a beam of a frame or building located over the machine from which it is desired to collect the static charges.

My absorber is suspended from the beam 1 by suitable hangers 2 and 3. The absorber consists of a pair of parallel bars of conducting material 4 and 5 preferably of copper provided at their ends with sockets 5* and 5°.

6 and 7 are bar members of insulating material slidable within the sockets 5* and 5° and provided with longitudinal slots 6* through which extend bolts 7* by which the bar 6 may be clamped in any desired position so as to vary the length of the absorber to suit the width of the various machines and the distance apart of the members from which the absorber may be suspended.

Between the bars 4 and 5 I secure a series of absorbing elements each of which consist of outer layers of millboard 8 and 9 between which are secured alternate sheets of tin foil 11 and onion paper 12. The elements are secured in position by copper rivets 13 which

extend through the bars 4 and 5, millboard sheets 8 and 9 and sheets of tin foil and onion paper 11 and 12, respectively.

14 and 15 are weak springs which bear against the outer face of the sheets of millboard 8 and 9 so as to normally hold the sheets 8 and 9, 11 and 12 in contact.

When the machine to which my device is applied is in operation air currents are produced by the moving parts which tend to spread the sheets 8 and 9, 11 and 12 apart towards the dotted position shown in Figure 3, and thereby produce sufficient collecting means for the static charges produced in the machine, which charges are absorbed by my device and in cases of small machines such charges are absorbed from the bars 4 and 5 by the surrounding atmosphere. In large machines where relatively large charges are produced a ground wire 17 may be provided to carry the charges off.

From this description it will be seen that I have devised a very simple and efficient device which may be readily applied to any machine, which will require no power to operate, by which the static charges will be effectively absorbed so as to eliminate the noise and fire hazard produced thereby, and which may be readily applied to any machine whenever desired.

What I claim as my invention is:—

A static absorber comprising a series of static absorbing elements each comprising outer layers of millboard and alternate layers of tin foil and onion paper secured between the millboard, means for securing the absorbing elements together, and simultaneously clamping the layers of millboard, tin foil and onion paper of each element together, and a weak spring carried by the securing means and bearing against the outer face of each layer of millboard adjacent its free end to normally hold the layers together.

WILLIAM HENRY COX.