May 18, 1926.

1,585,192

F. L. GREEN

SAND DOME FILTER

Filed Jan. 4, 1926

Fig. 1.

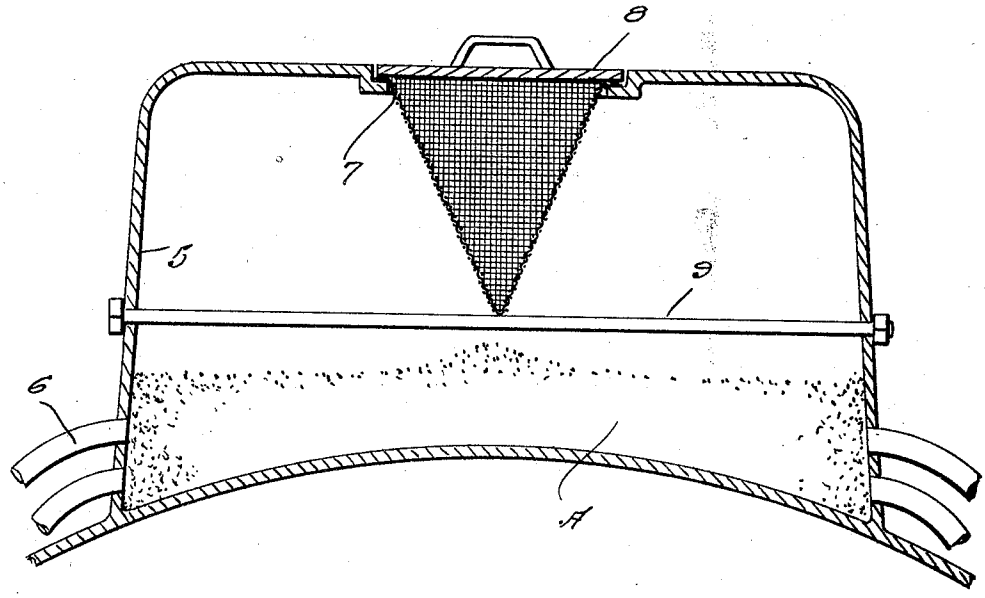
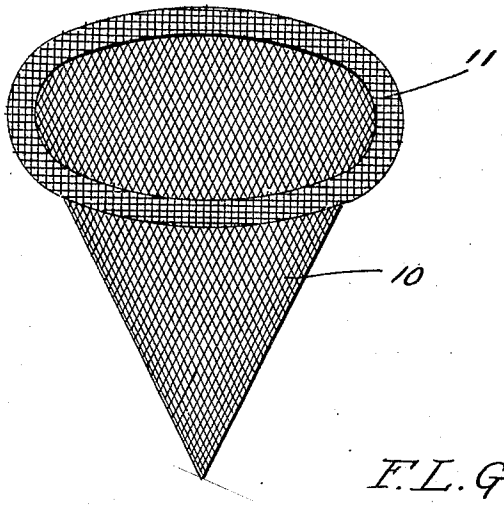


Fig. 2.



Inventor

F. L. Green

By Clarence A. O'Brien.

Attorney

Patented May 18, 1926. 1,585,192

UNITED STATES PATENT OFFICE.

FRANCIS L. GREEN, OF CASPER, WYOMING.

SAND-DOME FILTER.

Application filed January 4, 1926. Serial No. 79,120.

This invention relates to sand domes for all types of locomotives and has more particular reference to a filter therefor.

The primary object of the invention is to provide a filter for sand domes wherein large pebbles, rubbage and the like will be prevented from entering the dome and consequently clog the sand pipes, thus rendering inoperative the sanding mechanism of said locomotive.

It is well known by those experienced in the art that frequently the sand feeding pipes of locomotive sanding mechanisms will become clogged up without any warning whatever, and thus at times when sand is needed upon the rails in the stopping of the train, the desired result being thereby not produced, which is today the cause of train derailment and other train wrecks.

It is therefore the purpose of this invention to provide means whereby only fine sand will be delivered to the dome, thus allowing the efficient operation of the sanding device at all times.

To the attainment of this end I provide a simple, but efficient means whereby the sand that is ejected into the domes may be properly filtered for removing therefrom all large pebbles, or other earth particles, as well as any rubbish, that may have accumulated within the sand pile prior to its injection into the dome.

The foregoing and other objects will be readily understood when reference is had to the following specification and accompanying drawing, wherein like reference characters indicate like corresponding parts in both the views:

Figure 1 is a detail section through a conventional sand dome equipped with my novel filtering means, and

Figure 2 is a perspective of one form of filter that may be employed in attaining the end desired.

Now having particular reference to the drawing, 5 indicates the casing of a conventional sand dome for receiving a supply of sand A, and that has communication with the usual sand delivery pipe 6 whereby when the air valves are turned on, the sand will be properly withdrawn from the casing and delivered to the track rails for a purpose well known. The type of dome shown is provided in its top wall with a sand delivery opening 7, that is normally closed by a lid that is generally provided with a suitable locking means, not shown. Furthermore the type of dome shown is provided with a longitudinal stress rod 9 for an obvious purpose.

My invention per se constitutes a provision of a conical shaped receptacle 10 of relatively fine mesh wire, as shown, even though the conical shape herein shown is not necessary and I do not desire to be limited thereto.

In the form of the invention disclosed in the drawing, the upper end of the receptacle is flanged as at 11 for engagement within the usual rabbet at the edge of the delivery opening 7 in the dome casing 5, said flange interfering in no manner whatever with the proper positioning and locking of the lid 8.

It will thus be seen that in use the filter of this character, the sand that is injected into the dome through the opening 7 will first pass into the wire mesh receptacle 10 and be properly screened before entering the rail supply pipes 6.

Regardless of the shape or size of the wire mesh receptacle it may be readily removed from the casing of the dome after the lid has been raised in order that the same may be cleaned whenever necessary.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

1. In combination with a locomotive sand dome, a filtering screen receptacle adapted to be disposed within the delivery opening of the dome and to be retained therein by the closing lid for said delivery opening.

2. In combination with a sand dome, a wire mesh receptacle for disposition within the dome at its delivery opening and means formed upon the open end of the receptacle whereby the same may be supported upon the edge of the opening and there retained by the usual closing lid for the opening.

In testimony whereof I affix my signature.

FRANCIS L. GREEN.