

F. W. SCHNAUTZ.
DUMPING GRATE.
APPLICATION FILED NOV. 17, 1909.

972,256.

Patented Oct. 11, 1910.

Fig. 1.

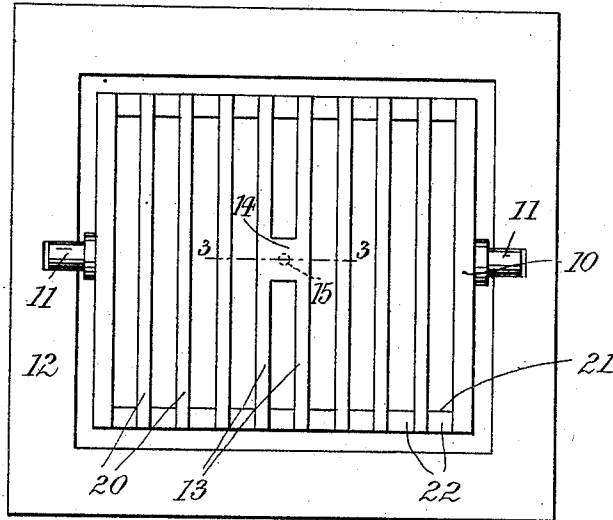


Fig. 2.

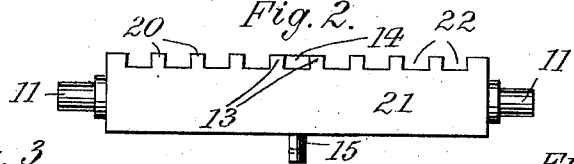


Fig. 3.

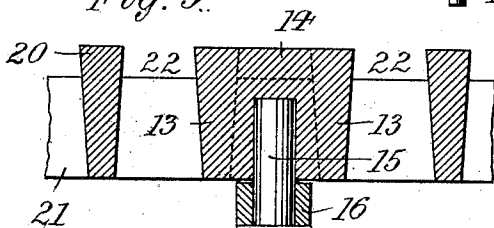
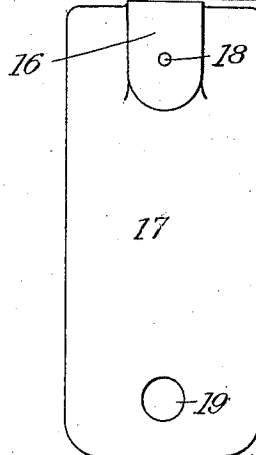
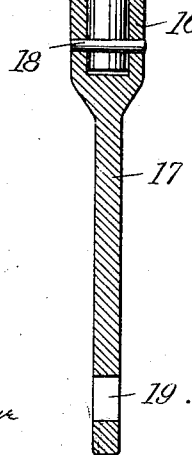
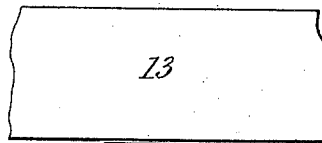


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

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DUMPING-GRATE.

972,256.

Specification of Letters Patent.

Patented Oct. 11, 1910.

Application filed November 17, 1909. Serial No. 528,476.

To all whom it may concern:

Be it known that I, FREDERICK W. SCHNAUTZ, a citizen of the United States, residing at New York city, Manhattan, county and State of New York, have invented new and useful Improvements in Dumping-Grates, of which the following is a specification.

This invention relates to a dumping grate and more particularly to improved means for oscillating the grate.

In the accompanying drawing: Figure 1 is a plan of my improved dumping grate; Fig. 2 an end view thereof, with the supporting frame omitted; Fig. 3 an enlarged cross section on line 3—3, Fig. 1, and Fig. 4 a side view of part of the grate showing its connection with the dumping means.

The grate 10 is provided with gudgeons 11 turning in frame 12, as usual. The two innermost grate bars 13 are connected to each other by an integral central bridge 14. Into the lower side of this bridge is formed, during the casting process, a socket that incloses the upper end of a downwardly extending pin 15 which is in this way permanently united with the grate. The protruding end of pin 15 is adapted to be removably engaged by the upper socketed end 16 of a downwardly projecting arm 17 which extends at right angles to grate 10. Arm 17 is perforated transversely near its top in alignment with a similar perforation of pin 15 for the accommodation of a dowel 18 by means of which the arm may be removably secured to the pin and consequently to the grate. At its lower end, arm 17 has an eye 19 for the accommodation of a suitable push bar, (not shown), by means of which the arm may be rocked to impart the desired tilting movement to the grate.

It will be seen that during transportation or storage, the arm may be readily disconnected from the grate, so as to economize space. So also the arm may be detached from a burned-out grate and reapplied to a new grate, to avoid waste of material.

The grate bars 20 are raised above the end pieces 21 of the grate, thus forming inter-

vening air channels 22 that materially assist in the combustion of the fuel.

I claim:

1. A dumping grate embodying a frame, gudgeons, spaced grate bars, and a centrally disposed bridge connecting the two innermost grate bars, a pin secured to the lower side of said bridge and projecting below the grate, an arm having a cup-shaped upper end adapted to embrace said projecting pin, and means for removably securing the arm and pin together, the arm having a perforation at its lower end.

2. A dumping grate embodying a frame, gudgeons, spaced grate bars, a bridge connecting the two innermost grate bars, a downwardly extending pin projecting from the lower side of said bridge, a relatively wide flat arm having a socket formed intermediate its side edges to provide a cup adapted to embrace said pin, the pin and said cup having perforations for alinement, and a dowel pin that engages the perforations of the pin and cup to removably connect the arm to the grate.

3. A dumping grate embodying a frame, gudgeons, spaced grate bars, a bridge connecting the two innermost bars, a pin projecting from said bridge, a wide flat arm having a socket formed intermediate its side edges to form a cup adapted to embrace said projecting pin, and means for removably securing said arm and pin together.

4. A dumping grate having gudgeons, a pin permanently fixed to the grate and projecting therefrom, a relatively wide flat arm enlarged transversely at its inner end intermediate the edges of the arm and socketed to provide a cup adapted to receive said pin, and means for connecting the arm and pin together.

Signed by me at New York city, (Manhattan,) N. Y., this 16th day of November, 1909.

FREDERICK W. SCHNAUTZ.

Witnesses:

W. R. SCHULZ,

FRANK V. BRIESEN.