

H. W. HACHMEISTER.
APPARATUS FOR DELIVERING ABRASIVE MATERIAL.
APPLICATION FILED AUG. 23, 1912.

1,063,434.

Patented June 3, 1913.

2 SHEETS—SHEET 1.

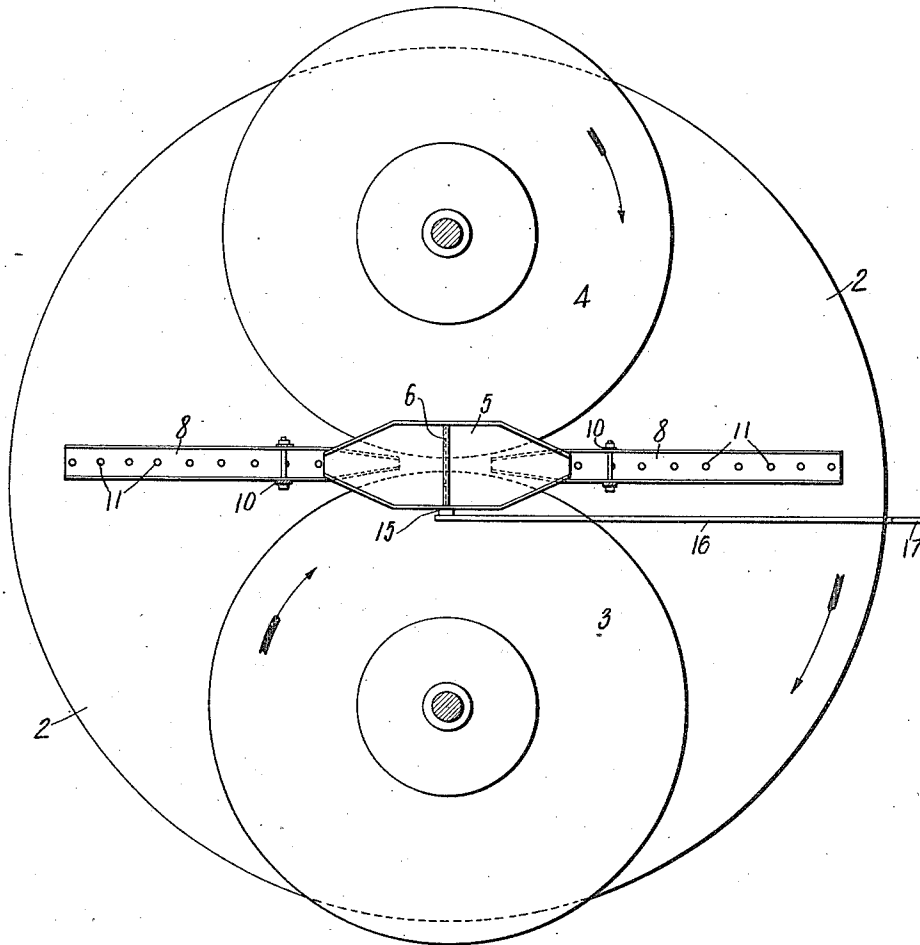


FIG. 1

WITNESSES

W. T. Holman
W. Seckman

INVENTOR

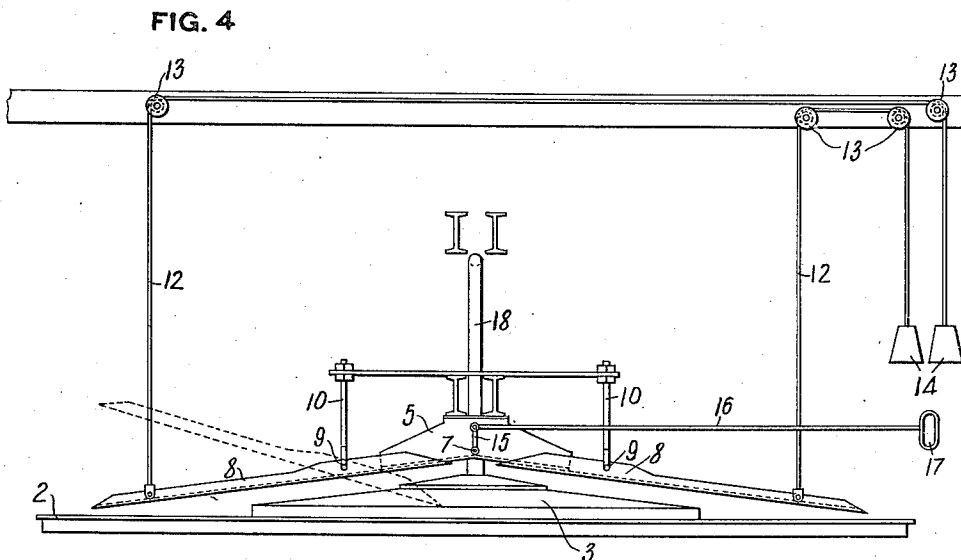
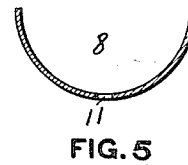
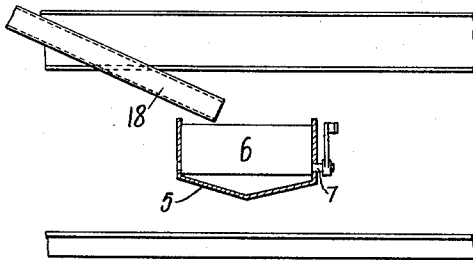
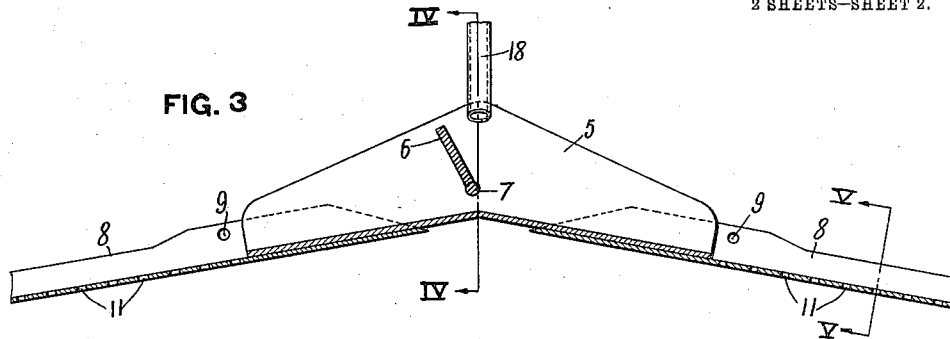
H. W. Hachmeister
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2 SHEETS—SHEET 2.



WITNESSES

W. J. Stohman
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FIG. 2

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UNITED STATES PATENT OFFICE.

HENRY WILLIAM HACHMEISTER, OF JAMES CITY, PENNSYLVANIA, ASSIGNOR TO
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APPARATUS FOR DELIVERING ABRASIVE MATERIAL.

1,063,434.

Specification of Letters Patent.

Patented June 3, 1913.

Application filed August 23, 1912. Serial No. 716,637.

To all whom it may concern:

Be it known that I, HENRY W. HACHMEISTER, a citizen of the United States, residing at James City, in the county of Elk and State of Pennsylvania, have invented certain new and useful Improvements in Apparatus for Delivering Abrasive Material, of which the following is a specification.

My invention relates to the art of grinding plate glass and refers particularly to apparatus for distributing sand or other abrasive material to the rotating table and runners, comprising a centrally arranged receiving trough, adapted to receive the abrasive material from any source of supply, a deflecting gate or valve thereto adapted to throw it from one end to the other, and individual distributing troughs arranged to receive the material from the main trough so mounted as to be capable of being set at varying angles to control the distribution of the abrasive material and deliver it at any desired point upon the table and with relation to the runners.

In the drawings illustrating the invention—Figure 1 is a general plan view showing a table, runners, and abrasive distributing mechanism. Fig. 2 is a view of the apparatus in elevation. Fig. 3 is an enlarged sectional detail view of the main and secondary distributing troughs. Fig. 4 is a cross sectional view on the line IV. IV. of Fig. 3. Fig. 5 is a cross sectional detail view through one of the secondary distributing troughs taken on the line V. V. of Fig. 3.

The grinding apparatus comprises a main circular supporting table 2 and runners 3, 4, of well-known construction, one of the runners, as 3, extending slightly beyond the center of the table 2, said runners being so mounted as to be vertically adjustable with relation to the table and provided with ordinary rotating mechanism, commonly employed.

Suspended above the main table at a position transversely between the adjacent edges of the runners, is the main trough 5 carried by any suitable supporting framework, as shown, and having across its middle portion a butterfly gate valve 6, adapted to be thrown on its pivotal shaft 7 to one position or the other beyond the center. The bottom of the trough 5 preferably slopes

downwardly from the center in opposite directions, as shown, whereby to deliver the material into one or the other of supplemental distributing troughs 8, 8. Said troughs are pivotally mounted at 9 in supporting hangers 10, suitably suspended, as shown, and the troughs 8 are of sufficient length to extend downwardly toward the periphery of the table 2, and inwardly underneath the bottom of trough 5 toward the center of the table 2. The bottom of each trough 8 is provided with a longitudinal series of perforations 11, through which the abrasive material may fall at varying distances outwardly from the main trough, when the supplemental troughs are in their normal lowered position, as indicated at 2 and 3.

For the purpose of vertically manipulating the troughs 8, each trough is provided with a flexible supporting member 12, as a chain or cable passing around the supporting sheaves 13 in a suitable frame-work and provided with equalizing counterweights 14, as shown in Fig. 2.

Valve 6 is manipulated by a lever 15 and rod 16 having a handle terminal 17 adapted to throw the valve 6 to one position or the other whereby to control the distribution of the material, which may be introduced into trough 5 and against one side or the other of valve 6 from the terminal 18 of a supply pipe or conduit.

It will be understood that the abrasive material is delivered to the trough from any classifying apparatus in the desired condition of fineness as to quality for the work intended at any particular stage, either dry or with a current of water.

The operation of the invention will be readily understood from the foregoing description. The normal inclination of the troughs 8 having been determined, material will flow outwardly therethrough in one direction or the other according to the setting of valve 6, and will be delivered in varying amounts through the openings 11 across the face of the table, it being obvious that the inclination of the trough will control the distribution of the material, whereby the operation may be readily gaged within the judgment of the workman and the requirements of the operation. Also, that the size of the openings 11 or their distances apart may be varied throughout the length of

the trough so as to further facilitate the distribution as desired. Also, that when it is desired to distribute the material inwardly toward the center of the table and between the adjacent edges of the runners, the trough may be tilted, as indicated at the left side of Fig. 2, by manipulating operating mechanism, utilizing the inner end of the trough to discharge all of the material to the center.

The apparatus as a whole is extremely simple and efficient in construction and operation; it possesses great flexibility as to adjustment and degree of distribution; it effects a saving in the abrasive material by delivering it directly to the points of immediate consumption, and as a whole will be found to greatly improve and economize the operation of grinding plate glass.

It will be understood that the invention may be changed or modified in different details of construction or design by the skilled mechanic, and to suit varying conditions of application, but all such changes are to be considered as within the scope of the following claims.

What I claim is:

1. The combination with a glass grinding table and its runners, of a receiving trough for abrasive material having a delivery terminal, a supplemental trough arranged to receive the material therefrom and to be variously tilted and actuating means therefor, substantially as set forth.

2. The combination with a glass grinding table and its runners, of a receiving trough for abrasive material having oppositely disposed terminals, supplemental troughs ar-

anged to receive the material therefrom and to be variously tilted and actuating means therefor, substantially as set forth.

3. The combination with a glass grinding table and its runners, of a receiving trough for abrasive material having a delivery terminal, a supplemental trough arranged to receive the material therefrom and to be variously tilted having a perforated bottom and actuating means therefor, substantially as set forth.

4. The combination with a glass grinding table and its runners, of a main trough provided with a deflecting valve and oppositely extending inclined delivery portions, a pivotally mounted distributing trough at each end of said main trough adapted to receive the material therefrom, and means for vertically adjusting said troughs, substantially as set forth.

5. The combination with a glass grinding table and its runners, of a receiving vessel located above the middle portion of the table and having an outlet terminal, a distributing trough adjustably mounted below the outlet terminal of said vessel and adapted to receive material therefrom and to deliver it to the middle portion or outer portion of the table, and means for adjusting the distributing trough, substantially as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

HENRY WILLIAM HACHMEISTER.

Witnesses:

THOS. J. DOLPHIN,
M. W. Cox.