W. WEBER.

FLUSHING HOPPER FOR SHALLOW AND DEEP DREDGERS.

APPLICATION FILED JAN. 22, 1921.

1,429,387. Patented Sept. 19, 1922.

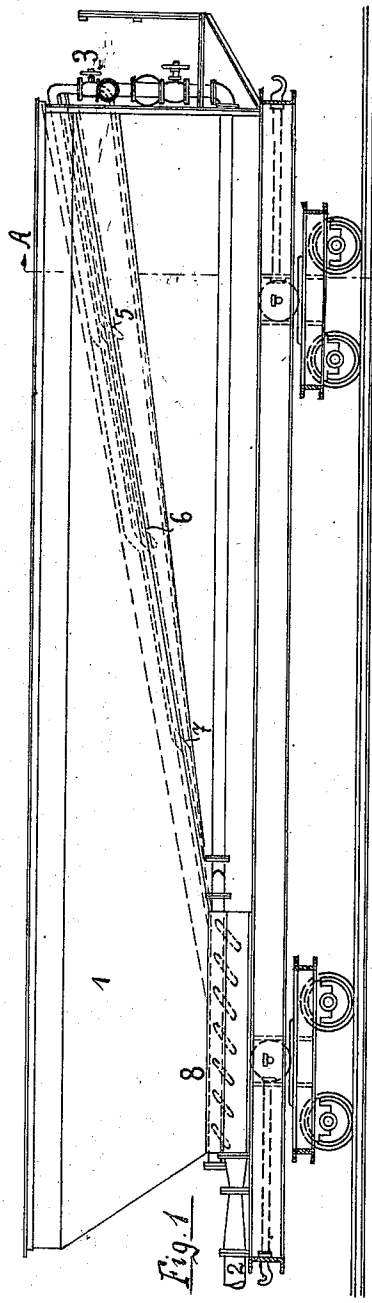


Fig. 1.

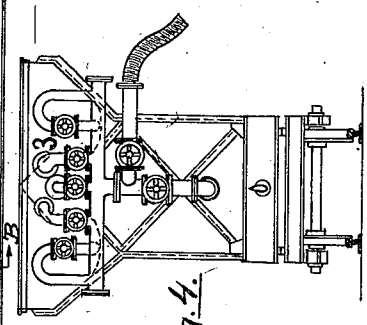


Fig. 4.

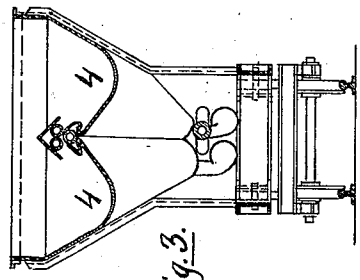


Fig. 3.

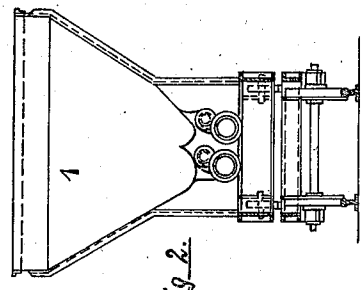


Fig. 2.

Witnesses:

Inventor:
Wilhelm Weber
By

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UNITED STATES PATENT OFFICE.

WILHELM WEBER, OF WIESBADEN, GERMANY, ASSIGNOR TO THE FIRM GEWERKSCHAFT HAUSBACH II, OF WIESBADEN, GERMANY.

FLUSHING HOPPER FOR SHALLOW AND DEEP DREDGERS.

Application filed January 22, 1921. Serial No. 439,275.

(GRANTED UNDER THE PROVISIONS OF THE ACT OF MARCH 3, 1921, 41 STAT. L., 1313.)

To all whom it may concern:

Be it known that I, WILHELM WEBER, a citizen of the German Republic, residing at Wiesbaden, Germany, have invented certain new and useful Improvements in Flushing Hoppers for Shallow and Deep Dredgers (for which I have filed an application in Germany Nov. 24, 1919, Patent No. 324,792), of which the following is a specification.

This invention relates to a flushing hopper designed to receive the material which has been dredged (for example of brown-coal open workings) directly from the dredger, said hopper being placed upon the passage way of the dredger. The material is admixed in the hopper with water and then conducted to the flushing conduit.

In order that the invention may be clearly understood I shall proceed to describe the same with reference to the example of construction shown in the accompanying drawing, wherein:—

Fig. 1 shows the dredger in elevation.

Fig. 2 is an end view of the same.

Fig. 3 is a cross section on line A—B of Fig. 1, and

Fig. 4 is the other end view of the same.

The device consists of a flushing hopper 1 which is about 10 meters long and mounted on wheels so that it can run upon rails. This flushing hopper is of such dimensions that it can be introduced in the passage way of the dredger so that the dredger can move over it and empty its contents into said hopper. The flushing conduit 2 is arranged at one end of said hopper and connected with the flushing main by means of a movable connecting sleeve. At the other end of the hopper the water pipe 3 is mounted. In the hopper two gutters 4 are arranged which get narrower in the direction in which the material is flushed and which join in a pressure apparatus. Several spraying nozzles 5, 6 and 7 connected with the water pipe are mounted in the side walls of said gutters.

The operation of the device is as follows:—

The flushing hopper is run upon the rails below the shooting trap and connected with the flushing conduit which is placed along the clearing. The water pipe 3 is also connected with the water main by means of a flexible tube. When the dredger begins to work the buckets give up their contents into the hopper. The material which comes from the dredger is seized at 5, 6, 7 or 8 by the water coming from the spraying nozzles and is conducted by the water to the flushing pipe 2.

Owing to the length of the hopper and to its special construction the dredger can continue to work until the workings have been worked for the entire length of the hopper whereupon the hopper is advanced and connected with another pipe connection of the flushing main according to the work of the dredger.

The invention will be useful where material dredged out by means of deep dredgers has to be flushed at any convenient place. Without the device described a movable connection between dredger and flushing conduit will be difficult to establish so that a continuous working would be impossible or at least very difficult.

I claim:—

An improved flushing hopper for material to be flushed in connection with deep dredgers comprising in combination with the hopper proper, flushing gutters which get narrower in the direction of movement of the material to be flushed, spraying nozzles in said gutters for supplying the flushing water, a flushing conduit in which said gutters terminate, means for connecting said flushing conduit with the fixed flushing main, a water pipe at the end of the hopper opposite the flushing conduit and means for connecting said water pipe with the water main.

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

WILHELM WEBER.

Witnesses:
WILHELM HUSCHMANN,
WALTER SCHROEDER.