THE BERRY AUTOMATIC SIPHON FOR FLUSH TANKS.

In the sewer flushing tank illustrated in the accompanying cut, the siphon is of cast iron, with a web between the limbs which serves to protect the relief trap. This siphon is set in concrete, the top of the short limb being level with the floor of the tank and covered with an iron lid sealed with cement, so as to be water-tight and air-tight. In the concrete floor of the tank is set a semicircular pipe, with one end close against the long limb of the siphon. An iron dome rests on the floor of the tank, and covers one end of this pipe and the long leg of the siphon. By removing the iron cover, the sewer and the short limb of the siphon can readily be inspected, this being one of the special features of the device. Water is admitted at any desired rate through the small iron pipe at the side of the tank. When the head of water in the tank is sufficient to overcome the weight of the column of water in the small trap, the air and water in this trap are suddenly blown out, the air confined in the siphon escapes through the relief trap, and the water in the tank then flows over the top of the long leg of the siphon and is discharged into the sewer. The rush of water carries dirt and other matter into the semicircular pipe and out through the siphon, the tank being practically self-cleaning, and having no water on the floor after the discharge.

The relief trap is so shaped that floating matter cannot enter to obstruct it, and it is filled entirely by the overflow from the large siphon. It is out of action during the action of the large siphon. These siphons have been used at Iowa City, Ia., and are well spoken of by the City Engineer, Mr. C. S. Magowan, and his assistant, Mr. W. H. Cochran. They are manufactured by the Berry Flush Tank Co., of Iowa City, Ia., and we are indebted to that company for blue prints and other information.