

Mode of Procedure.—The cathodes are scraped once every day and the deposited silver removed to the melting room; this is done as follows:—The tank is disconnected and the whole of the frame-work together with the electrodes and collecting-boxes is lifted clear out of the solution; the cathodes are then 'stripped' by means of a pair of silver-tipped tongs—the deposited silver falling into the collecting-boxes. These boxes are about 22" square and 10" deep, made of $\frac{3}{4}$ " pine and provided with a hinged grid-bottom covered over with canvas to allow the solution to drain off but which retains the silver. The frames are then raised about 2' higher and the pin which holds the grid-bottom in place is knocked out when the bottom falls depositing its load of silver into a wooden tray previously placed underneath. As soon as all the cells have been relieved of their silver which is sent to the melting room, the frames are lowered and the tanks connected up again.

The gold, which is retained in the canvas bags in the form of a dark slime, is washed in three different waters and sent to the gold room to be refined.

(ii.) The Improved Moebins Process which, as its name implies, is only a modification of the former process makes use of a silver belt as an anode instead of silver sheets. Before I left they were using this in 12 tanks and were engaged in putting up 60 new tanks to be used in this process.

The tanks are arranged in twelve sections separated by 4' aisles and each section consists of six tanks, arrayed in 3 tiers, 15" apart; three iron cross-pieces rigidly attached to pillars and extending on either side of them form supports for each pair of tanks. The distance from the floor to the top of the uttermost tank is 5 feet 6 inches. The tanks themselves are made of one piece of pine wood 14 feet 3 inches long, 16 inches wide and 7 inches high, gougeed out in the centre and lined inside with canvas cloth and coated all over with an acid-proof paint.

In each tank there are 24 frames—known as diaphragms—about 18" \times 4" and 1 $\frac{1}{2}$ " deep, whose bottom consists of canvas, and in this an anode is placed resting on hickory supports. Running underneath and within $\frac{1}{2}$ " of the frame bottoms is a belt 31' \times 15" made of rolled sheet silver 1-32" thick, on the outer surface of which the silver is deposited;