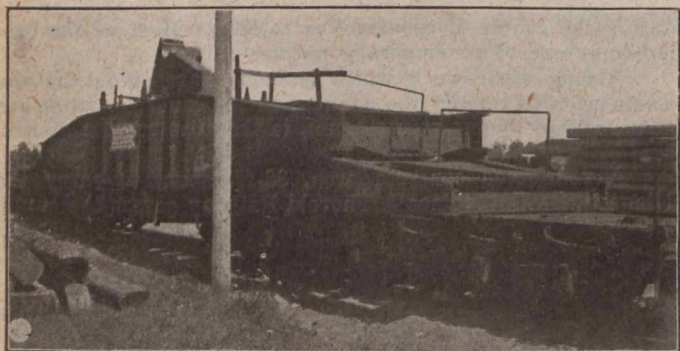




CRUSHER PLANT—PRIMARY TRAYLOR CRUSHER AT LEFT, GYRATORIES IN CENTRE, SCREENS ABOUT TO BE ERECTED AT RIGHT—CAPACITY, 3,500 CU. YDS. DAILY

is practically completed. An arch of 100 ft. span has been built to carry the Wabash Railway. Where the Grand Trunk Railway and the Michigan Central Railway cross the line of the canal, the tracks are only about 90 ft. apart; therefore, with a view to future requirements, the skew arches that will carry these railways across the canal will be carried though, making one continuous structure and providing ample room for additional tracks. These two railways have been temporarily diverted during the con-



THE BETHLEHEM STEEL CO.'S SPECIAL ARTILLERY TRUCK WAS REQUIRED TO CARRY THE MASSIVE PARTS OF THE TRAYLOR JAW CRUSHER

struction of this bridge, and work has begun on the foundations.

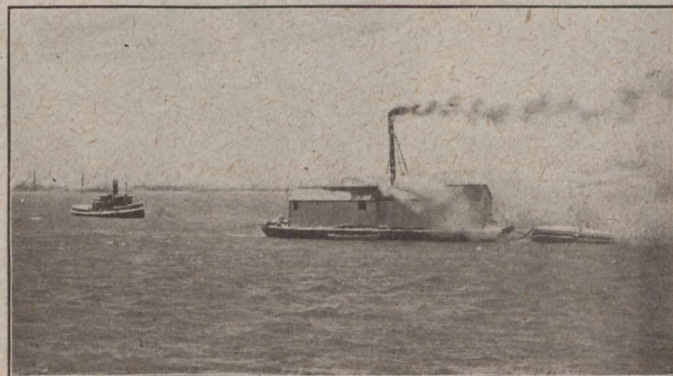
The N. St. C. & T. R'y bridge involved the diversion of the existing single track to one side of the bridge site and the construction of a double track reinforced concrete arch with 86 ft. span, having a rise of 25 ft. This arch was designed for Coopers' E-60 loading, and contains approximately 3,500 cu. yds. of concrete and over 90 tons of steel. The depth from base of rail to foundations is 52 ft. Lackawanna sheet piling was driven around the abutments, cofferdams were unwatered and material excavated to required depth after a great deal of trouble was caused by the satura-



DUMPING ROCK FROM TRESTLE FOR FILL AT THE WHIRLPOOL GULLY

tion of the surrounding subsoil. The arch was completed and traffic restored to the original alignment last December. A temporary timber trestle was designed to carry the N. St. C. & T. R'y line over the construction railway tracks, which are in the canal prism and parallel to the centre line of the canal.

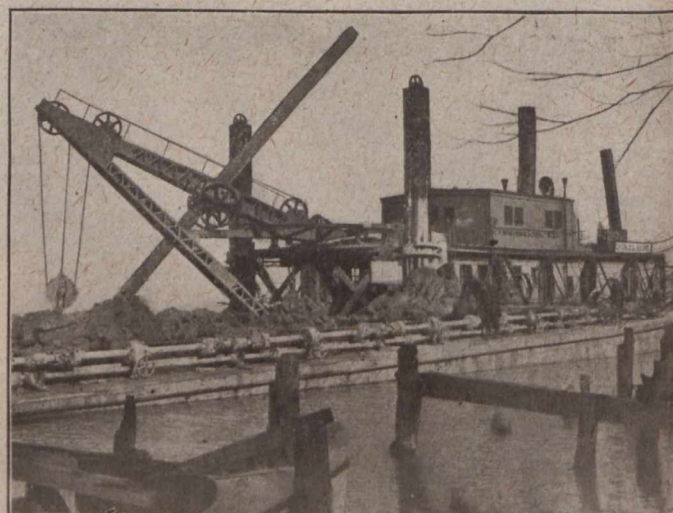
The Wabash line was diverted on a timber trestle over 40 ft. high, extending across the previously excavated canal section. The excavation of the canal prism thus provided natural drainage for the foundations for the 100-ft. reinforced concrete arch. This arch differs in design from the N. St. C. & T. R'y arch, as the Wabash arch has straight wing gravity walls instead of the reinforced cantilever type



SCOW-LOWERING AND REHAULING OUTFIT AT WORK ON THE NIAGARA RIVER

used in the other arch. There are approximately 3,000 yds. of concrete and 65 tons of reinforcing steel in the construction. The structure provides for two tracks, spaced 13 ft. centres, which will take care of the requirements of that railway for many years. The main line tracks of the Wabash are also carried over the construction railway by means of a temporary trestle.

A 3-track trestle about 400 ft. long has been built for the diversion of the main line of the Grand Trunk and the branch line of the Michigan Central. Upon completion of the



DREDGE AT WORK ON THE WELLAND RIVER

outside portions of the new arch, it is intended to re-divert traffic to the present alignment. The new structure will be a reinforced concrete arch, having a span of 72 ft. and rise of 20 ft. and involving the placing of 10,000 cubic yards of concrete and 325 tons of steel. It will provide room for 10 tracks. In the restoration of the G.T.R. and M.C.R. to the original alignment, a temporary timber trestle will carry the tracks over the construction railway. The trestles for diversion and relocation of these railways involve the use of over 300,000 ft. of timber.