## A 378-Ton Chimney

NEW FEATURE AT WARKWORTH CEMENT WORKS

A 378-ton chimney has been erected at Wilson's Portland Cement Company's works at Warkworth. It is built of ferro-concrete, and is bound to prompt inquiry on behalf of representatives of other businesses requiring tall and strong shafts.

The chimney is 140-ft, high, the inside diameter being 9-feet (from top to bottom). The foundation



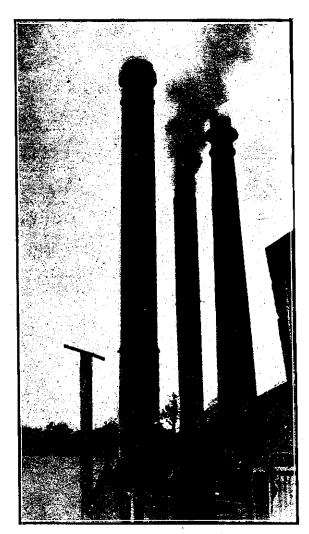
View showing Circular Formes employed

measures 24 feet x 24 feet, working up 13 feet x 13 feet to the ground level, being 3 feet deep on solid limestone, reinforced with two tons of rails.

The base of chimney measures 12 feet x 12 feet, and has three openings, one being a manhole and the others being the flue connections. Being square on the outside and round on the inside, the walls measure at the thinnest part 18 inches and rise to a height of 21 feet where it steps into 9 inch walls, being round from there upwards for another 30 feet, where a collar projects, and then steps into a five inch wall, rising at that thickness to the head which projects out 12 inches, and then steps in again to

the six inch wall. The whole is reinforced with } inch 3 inch 5 inch uprights, and 1 inch horizontals, round iron and steel. The approximate weight of the chimney is 378 tons, and the time taken to do the job, including foundation was a little over four months, the cost of labour from foundation being £200 15s.

The whole work was carried out under the supervision of Mr. W. Civil, the design being drawn by



View of Finished Chimney

Mr. T. H. Wilson, works manager. The material used was as follows:—6 tons steel, iron, and wire; 2 tons 6 cwt. of 14-lb. rails; 37 tons cement; 333 yards aggregate. The proportions used were 1 cement, 2 sand, 4 shingle.

## His Kick.

<sup>&</sup>quot;I wont pay one cent for my advertisement this week" declared the storekeeper angrily to the editor of the country paper. "You told me you'd put the notice of the shoe polish in the reading matter."

<sup>&</sup>quot;And didn't I do it? inquired the editor.

<sup>&</sup>quot;No, sir!" roared the advertiser.
"No, sir, you did not! You p You put it in the column with a mess of poetry; that's where you put it !- Ladies' Home Journal.