

FROM OUR READERS

These pages are reserved for articles from our readers. Contributions not exceeding 500 words in length are invited on any subject of general interest. These should be written neatly on one side of the paper only, and they may be accompanied by photographs

Cranes for Fuller's Earth Pits

The accompanying illustration shows the smallest of three large cranes installed in the Fuller's Earth Pits near Redhill, Surrey. These cranes were built by Stothert & Pitt Ltd. of Bath, and their work is of rather an unusual nature. The Fuller's earth exists in the ground in layers down to a depth of as much as 60 ft. These layers have to be uncovered and the cranes move the excavated earth from one side of the pit to the other. The excavations may reach a depth of 20 ft. below the crane track, and after the Fuller's earth has been removed, the ground is again made up to the level of the track, which is transferred so that the crane is running on made-up ground. Hence it is very important that the wheel pressures should be distributed as evenly as possible.

The largest of the three cranes has a lifting capacity of $3\frac{1}{2}$ tons at any radius between 45 ft. and 110 ft. at 200 ft. per minute, and the load can be luffed at 120 ft. per minute. It is fitted with the "Stothert & Pitt" horizontal luffing gear which, with the aid of a moving ballast box at the back of the crane, balances the jib and load in all positions. When the crane was originally tested the luffing gear pinion was taken out of gear completely. The luffing barrel then remained motionless, proving the accuracy of the balance.

The motions of lifting, luffing and travelling are operated by a pair of horizontal engines with cylinders of 10 in. diameter and 14 in. stroke, the travelling speed being 150 ft. per minute. Steam is generated by means of an oil-fired "Spencer-Hopwood" water-tube boiler and the steam is superheated. Swivelling is effected by a separate set of engines, 7 in. diameter and 10 in. stroke, which drive, by means of spur and bevel gearing, a steel pinion that engages with a pin rack fitted on the top of the track. The truck is made very rigid by means of steel plated sides and in order

or sketches for use as illustrations. Articles that are published will be paid for at our usual rates. Statements contained in articles submitted for these pages are accepted as being sent in good faith, but the Editor takes no responsibility for their accuracy.

to distribute the load each corner is provided with two 4-wheeled bogies so arranged that all wheels at one corner of the truck carry equal loads.

L. F. DURMAN (Caterham School, Surrey).

A Visit to Lowestoft Fish Docks

"Hey there!" cried a rough voice, and a handcart bumped me from behind. I promptly dodged, but another cart caught me and yet another. I was just thinking that I should be crushed between them when a strong hand grasped my shoulder and hauled me into safety. This was my introduction to the fish docks at Lowestoft.

My rescuer, a bronzed, powerfully built fisherman, grinned cheerfully at me. "Near shave that, miss!" he said. "They're much too busy to be polite," he added, "but just stand here and you will be out of the way."

From my place of safety I watched the crowd, which included strapping young fishermen, clad in blue jerseys and heavy sea boots or wearing coarse brown smocks reaching to their knees, and queer old men who might have stepped from one of the stories of W. W. Jacobs, with tufts of beard bristling on their chins or surrounding their faces from ear to ear! Some lounged about, smoking and chatting, while others were busy unloading, salting and packing fish. Boys raced along handling

heavy carts with marvellous ease, sometimes stopping suddenly and then darting forward again, throwing their whole weight into the manoeuvring of their carts through apparently impossibly small spaces.

A smack was unloading its catch. Baskets of fish were lifted through the hold and deftly swung on to the quay by means of a long iron hook. There the fish were sorted at lightning speed and packed into boxes or barrels ready to be sold by auction. The auctioneer, resplendent in a coat of spotless white and surrounded by a crowd of

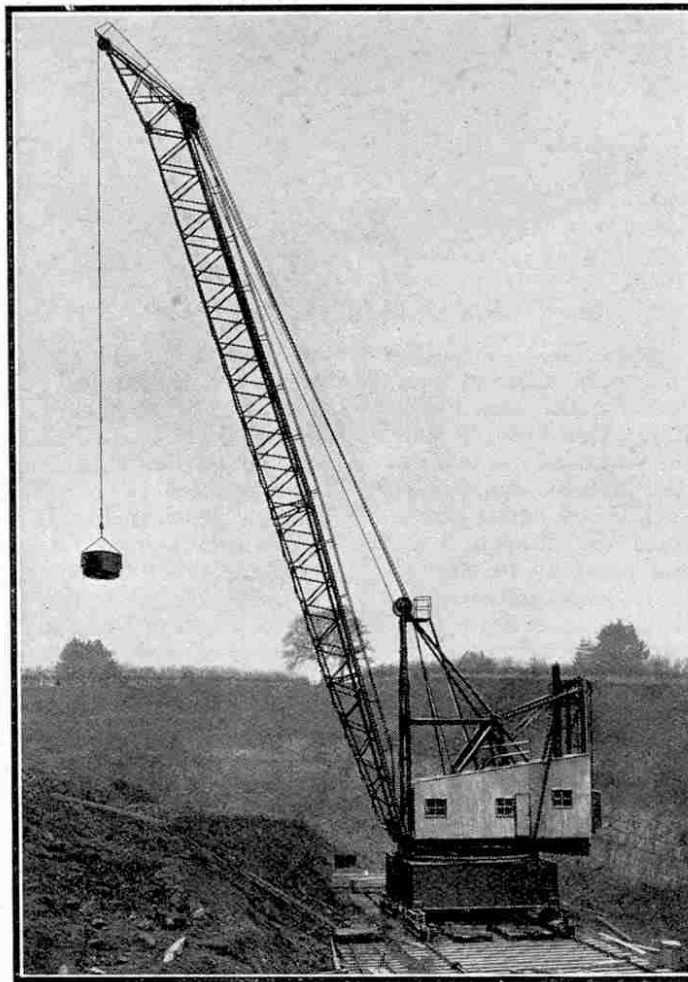


Photo courtesy]

Crane at Fuller's Earth Pits

[Stothert & Pitt Ltd.]