



IONA ISLAND'S LOCOMOTIVE.

Being run by compressed air, it emits no sparks. Used to haul the ammunition.



INTERIOR OF
Workmen in white serge

CONFINED DESTRUCTION.

Where Smokeless Powder Is Put in Shells for Naval Practice.

The great naval magazine at Iona Island, forty miles up the Hudson from New York, where thousands of shells are constantly being loaded with tons of smokeless powder for the American fleet, is one of the most important government plants in operation. Owing to its isolated location and strict rules against visitation, the outside world rarely gets more than a distant glimpse of it from the passing river steamers. Through the courtesy, however, of Admiral Coghlan and Captain M. S. Wood, commandant of the station, a Tribune man had an opportunity to witness the operations and obtain the first series of photographs since the great explosion which wrecked the plant about three years ago.

Formerly an ordinary picnic and excursion resort, covering 116 acres, the government purchased the tract for \$160,000 in 1900. The place was regraded and transformed by engineering work and a valuable and busy naval base arose, with dozens of magazines, a powder house, dwelling houses, a railroad, electric and telephone plants, waterworks, etc.

Suddenly by a terrific explosion on November 4, 1903, the plant was almost wiped out of existence. Six men were killed, several more wounded and two shellhouses were blown into atoms, other buildings were more or less damaged and large quantities of costly shells and smokeless powder were lost. The explosion occurred while workmen were placing loaded shells on a flatcar for transfer to the Brooklyn Navy Yard.

To re-erect the destroyed buildings and repair the damaged ones took considerable time. Additional precautionary contrivances were in-

stalled to prevent a repetition of the disaster, and now the plant is in full operation again, employing 125 men in the various departments. They are paid from \$2 to \$4 a day and are necessarily a body of unusually sober and careful operatives. To house the vast quantity of war material and ordnance supplies stored there requires six spacious brick and stone powder magazines, 200 by 50 feet, four shellhouses, two general storehouses and four powder filling buildings.

Owing to the rapid increase of the navy the station is taxed to its capacity to keep abreast of the demand to furnish new war vessels and old ones with their quota of ammunition. Just now the recently returned North Atlantic fleet, which exhausted its allotted ammunition in target practice, is being supplied with new shells and powder charges. To be prepared for any emergency each ship is required on coming back to the navy yard to restock as soon as possible her empty magazines. Also in many instances the powder charges have to be reduced. This is found out at target practice. Then the bags are sent up to Iona Island, opened again and the powder reweighed.

Two large ordnance tugs, the Apache and the Pontiac, go alongside the vessels and take off the hundreds or more cans of powder, to be either increased or diminished, and also take on new unloaded shells from the Brooklyn Navy Yard. These are packed on lighters flying a red flag, which are towed up to Iona Island. On reaching the landing the material is transferred to railroad cars on the wharf and taken to one of the storehouses or magazines. The train is pulled by a little sparkless, compressed air locomotive. The engineer when he wants more power has no coal to shovel in, but simply steps down from his cab at certain points along the track and connects a valve on the engine with an air pipe running from the central station. In a moment 700 pounds' pressure is taken on, and this is allowed to run down to 50 pounds



LOADING A 13-INCH SHELL WITH ITS BURSTING CHARGE OF FIFTY POUNDS OF BLACK POWDER.



PILE OF LOADED SHELLS FOR THE UNITED STATES SHIP CONNECTICUT. Each in a rope sling for convenience in handling.



CLOSE VIEW OF THE NAVY'S... The open bag contains fifty-five pounds...