

REPAIRING 100-POUND MINES ON FORT TOTTEN WHARF.

**ARMY SCHOOL MOVING.**

**Fort Totten Submarine Defence Plant Going to Fortress Monroe.**

By water and rail the School of Submarine Defence at Fort Totten, Long Island, is being moved this month to its new quarters down the coast in Fortress Monroe, Virginia. Seldom, save in war times, do army quartermasters get such a heavy task put upon them. Every transport in the depot quartermaster's fleet will be called into use, and as much of the movable things as the army can handle will be handled by the soldiers and not trusted to the railroads, for mine apparatus is expensive.

Officers and men who form the body of students there are packing workshop and classroom equipment preparatory to embarking for the new seat of instruction on the Chesapeake. Laboratory and machine shops are being dismantled, fathoms of steel cable and tons of explosives crated for shipment south, and the delicate electrical instruments used in the establishing of mine controls taken apart and wrapped piece by piece as though made of the most fragile china.

With its abandonment as an army service school the old fort near Whitestone Landing which has been an engineer or artillery headquarters since the close of the rebellion settles back into the humdrum existence of a harbor fort in peace times, with only a sufficient garrison to care for the big guns and keep the weeds from overgrowing the mortar pits. Casual observers will not notice this abandonment. Save for the absence of the mine planters at drill, the grassy heights of the fort from the waterfront will stand as impassive as ever. Inside the ramparts the grand old trees will keep peaceful watch over the green parade and officers' quarters.

Sound steamers of the merchant marine and pleasure fleet, however, will be quick to note the change. More than one frigate skipper of a coal tow or excursion boat has been held up in the narrow channel while the school at its lessons touched off a mine of guncotton, and if the resultant roar and gigantic spout of water were not a treat to him they certainly were to his passengers.

The New-York public had hardly time to realize the nature and importance of the post-graduate school at Fort Totten before its removal South was ordered by the War Department. The new school was established at Totten when the artillery service took over the mine part of the coast defence work from the engineers, and the artillery then developed the plans for the submarine defence of the nation's coast line. Wiring every harbor between Maine and Alaska was a big job, and to begin it properly General Murray, then a major of the line, was intrusted with the responsibility of organizing a corps of instructors among the officers and men.

Officers came to it readily enough, as the new work offered an opportunity to specialize. The men—the trained working crew—were obtained by offering the youth without means to obtain a college course an education, with board, room, clothes, books and pocket money, in return for a three years' enlistment and a willingness to do hard manual labor while learning their trade for Uncle Sam.

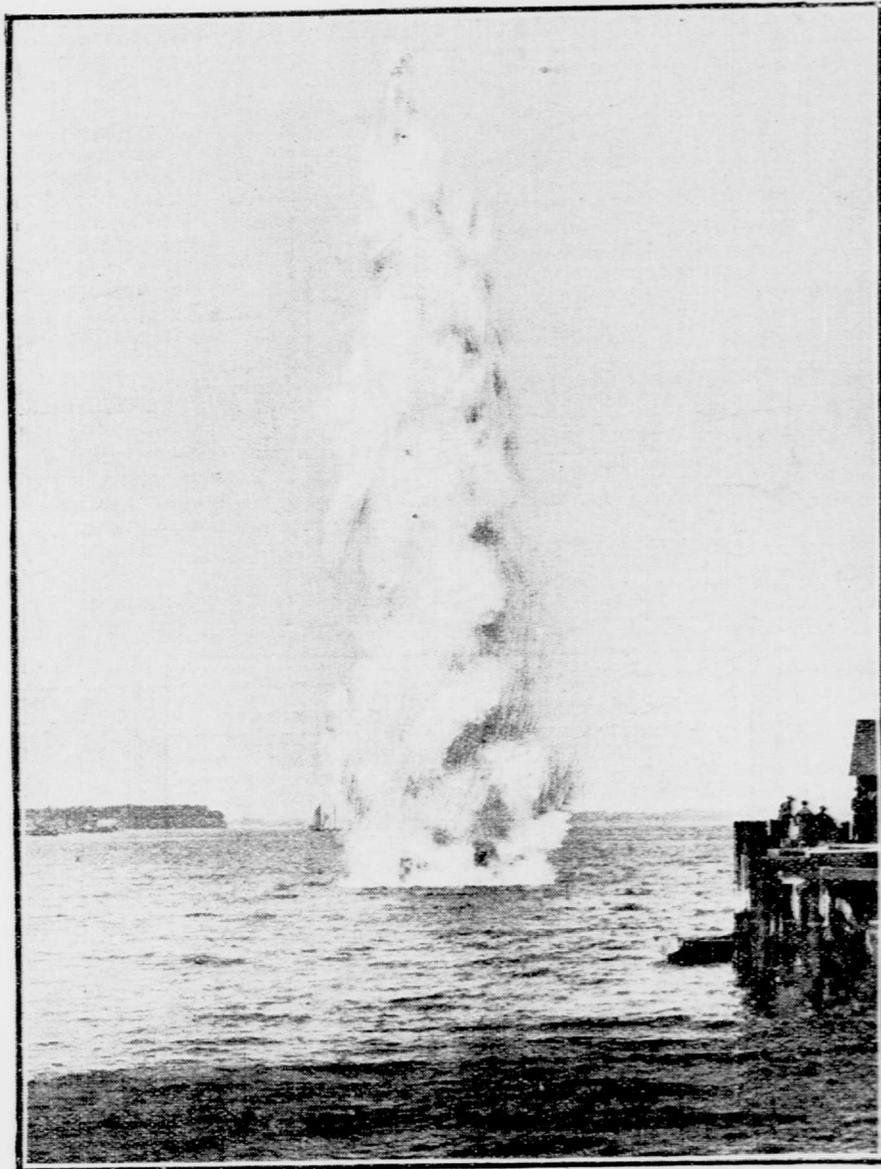
Among the force at work to-day moving the stores and equipment of the school aboard the quartermaster's boats at Fort Totten may be found officers and men from almost every state in the Union. They work eight, ten and twelve hours a day and consider themselves well off for having the opportunity. When they get to Fortress Monroe and set up their college they will again take up the routine of theory and practice and proceed with their problems and instruction as before.

Military discipline prevails at all times in this school, but the men are put more upon their own initiative than at other army posts. In winter the two schools, one for officers and one for men, are confined to the shops, engine and lecture rooms. When spring brings its milder weather, casemates, observation towers and

mine planters are manned, and the theories taught indoors are put into practice under conditions as near those of active service as possible.

Officers and men in their respective places are taught how to mine channels and harbors, how to connect these engines of destruction with controls on shore, how to find the range of an approaching enemy, how to "plot" the attacking fleet as it crosses the mine fields, and how to explode the torpedo the moment the target is

at \$25. They do full military duty besides the hours put in at recitations and study, and if at the end of a man's course he passes examinations which qualify him for the long sought chevrons he will serve out his enlistment at \$45 or \$50 a month. Some get as high as \$65, and all have food, clothing and housing supplied free. Perhaps the government will get five years' service out of a bright, capable man after he passes his sergeant's examinations. It does not average any more than that. Then



EXPLOSION OF A 50-POUND MINE. In the channel between Fort Schuyler and Fort Totten, New York Bay.

within range, or perhaps to fire one mine in a nest of five without disturbing the others. All this means a thorough knowledge of engines and dynamos, of delicate electrical apparatus, gunnery, telephones, telegraph and the wireless.

The enlisted men are classified and placed as they qualify upon examination at their entrance. If practical electricians or stationary engineers they are soon promoted. Many are absolutely green hands unable to tell a dynamo from a battery when they enter, but they are eager to learn and willing to work. The latter qualification alone entitles them to the apprenticeship, for the school has no time to spend on the boy whose ambition is limited by a desire to "see the world," or the shiftless man who cannot make a living elsewhere.

Work does not cease with "mess call" or "taps." In the power plants year after year there are day shifts and night shifts, just as in any well ordered factory, and in summer the work if anything is doubled. The men receive regulation army pay, and every encouragement is offered for advancement, the higher grades of service actually yielding good salaries. Some of the men enter at \$18 or \$20 a month, some

the sergeant will generally quit the service and go to some construction company for \$100 a month.

As rapidly as officers and men finish at the school they are sent to the artillery posts along the coasts to put into practice the instruction acquired.

In the winter months the mine planters, as the ocean-going tugs of the school are called, go South manned by a picked crew to take out detachments from the coast forts for practice and instruction in laying and taking up mines and torpedoes. There are four of these mine planters operating on the Atlantic and Gulf coasts, each designed and built for this particular service—the General Henry J. Hunt, the General Henry Knox, the General George Armistead and the Major Thomas Ringgold—all named after artillery officers distinguished in the wars of the Republic.

In the summer they work northward up the coast. Mines are planted and taken up again, soundings made, fathom upon fathom of stiff cable laid under a burning hot sun, taken up and laid again, and Johnny Green from the country, who enlisted to be a soldier, sits on the gun's le of a whaleboat and wonders what it is all about, and whether the army has gone to sea or if he is just an ordinary, plain roustabout or longshoreman.

Trained like the crews in the turrets of our battleships, these artillery men work with a precision and dispatch acquired by long practice. Any one of the top sergeants is as capable of directing the responsible work as the officers themselves.

The writer personally witnessed an exhibition of their efficiency in the channel that flows between Forts Schuyler and Totten. The captain and instructor put his sergeant in command that day, telling him to mine that channel against an attack from the sea. On board the planter were six big steel cans, each built to hold a hundred pounds of guncotton, together with several fathoms of steel cable, multiple cables and distributions. The detachment under the sergeant's directions put them overboard, anchored them and connected them by wires with a switchboard on shore at the rate of one mine in seventeen minutes. This was fast work, and particularly so on a flood tide. If a sea had been running or a fog had come in, the artillerymen would have been forced to work much slower. According to figures given out by the instructor that day, a crew of average ability can close a good sized harbor in less than twelve hours and make it safe from a dash of the enemy's torpedo fleet in forty-eight.

**GOOD CAUSE FOR TEARS.**

Harry Lauder, the Scottish comedian and golfer, was describing at a dinner in New York a great golf professional.

"But he is ugly," Mr. Lauder said. "Dear me, he is ugly. He is as ugly as that mediæval Sultan who had all the mirrors removed from his palace so that he might avoid the pain of seeing his own face."

"This Sultan called on his Grand Vizier one day and by accident happened to catch sight of his reflection. His hideousness overpowered him and he broke into violent sobbing. In this outburst the Vizier joined."

"Finally the Sultan calmed down, wiped his eyes, and got ready to smoke and talk. But not so the Vizier. He sobbed on and on. His master, tapping his slipper impatiently on the cushions, waited for him to cease."

"At length the Sultan got angry, and exclaimed:

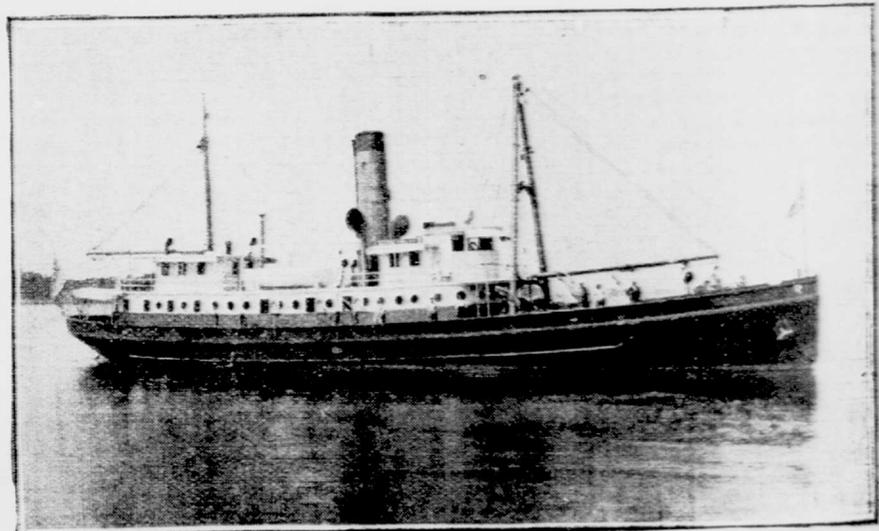
"Why do you weep longer than I, Vizier?"

"Alas!" the Grand Vizier replied, "you wept, O Commander of the Faithful, because you saw your face but for an instant; but I see it all day and every day."

**A TARKINGTON EPIGRAM.**

"Booth Tarkington, at a theatrical supper, spoke rather well," said a playwright, "on marriage. One remark in his speech struck me particularly by its epigrammatic truth. It was this:

"Before she marries him, a girl's opinion of a young man is the same as his mother's; after marriage she comes round rather to his father's views."



THE MINE PLANTER GENERAL HUNT. Used for instructing artillerymen along the North Atlantic coast.