THE NEW DUELING SCHOOL IN PARIS.

It seems that after all the absurd so-called "duels" which we read about as having taken place in France, Germany, and Italy, may really in the near future turn out to be very lethal affairs indeed. Hitherto, if an officer, a lawyer, a journalist, or other insulted a colleague, seconds exchanged visits, a meeting was arranged, and shots fired with quite farcical results as a general rule; for ordinarily the average professional man, even in a military nation like France, is a deplorably bad shot, and there was usually no more visible result after the so-called "duel" than an amusing paragraph in the papers.

A Student at the Dueling School Wears a Mask Which Will Protect Him from Injury but Which Will Enable Him to See His Target.

That the French mean business in the near future, however, in this matter, will be seen from the fact that regular dueling schools have just been established in Paris, as well as in Rome and Berlin and Vienna—not merely for swordsmanship alone, but also for regular practice with the long-barreled dueling pistol. The principals wear long padded overalls, and curious masks, like those of the deep-sea diver, with a very thick glass plaque in front of the face.

The "bullets" used are pellets of clay, which, however, might do very serious damage to the pupils in these remarkable academies were it not for the glass protection over the face. Lessons are first of all given in the elaborate etiquette of dueling, and next comes instruction in the necessary "deportment."

Last and most important of all comes the duel proper, with the measuring out of the ground, the loading of the powerful spring pistols with the soft clay balls, and the aiming on the part of each combatant at a vital spot—usually the head. No doubt the knowledge that the shooting is innocuous tends to make the duelists' aim very accurate, but there can also be no question that it familiarizes a man with the entire routine of a procedure which, without this initiation, would be extremely disconcerting to the bravest.

Needless to say, the majority of the pupils by no means have real duels upon their hands; but among a passionate people like the French, quick to anger and to avenge real or fancied insult, there is no lack of attendance at the various schools, of which three or four have already been opened in the French capital. The largest of these is a handsome saloon on the first floor in the Rue Castiglione, and its *séances* are attended by crowds of the gilded youth of Paris, who are attracted thither by the novelty of firing direct at the living man, and watching the comedy of farcical duels, which may become very real ones at a day's notice.

COMPARISON OF A TURBINE AND A RECIPROCATING ENGINE FOR THE UNITED STATES NAVY.

Although we have been rather late in taking up the question of the marine turbine in this country, it is gratifying to know that the two most successful forms of the turbine, the Parsons and the Curtis, the former a British, and the latter an American development, are now under construction for use in American-built vessels. Of the various marine turbine installations proposed or in course of construction, perhaps the most interesting is that which is being built by the Fore River Shipbuilding Company for the United States scout "Salem." The "Salem" is one of three 24-knot ships which were authorized in 1904, and whose contract was signed in May of 1905. In designing these vessels, the government wisely determined to use the opportunity here afforded to test the relative efficiency of the turbine and the reciprocating engine in the propulsion of fast ships. The contract for the construction of two of the vessels, the "Birmingham" and the "Salem," was awarded to the Fore River Shipbuilding Company, and the third vessel was given to the Bath Iron Works, Bath, Me. The two ships which are being built by the Fore River Company, the "Birmingham" and the "Salem," will be equipped respectively with reciprocating engines and Curtis turbines, while the "Chester" will be driven by Parsons turbines. The engines of the "Birmingham" will be of the twin-screw vertical expansion type; those of the "Chester" will consist of four turbines, driving four propellers, while the "Salem" will be driven by twin-screw turbines.

These navy scouts will be 420 feet long, 47 feet 1 inch in beam, and the mean draft will be 16 feet 9 inches, on which draft they will displace 3,750 tons, the full-load draft being 4,687 tons. Each ship will be armed with twelve 3-inch rapid-fire guns and two of the new 21-inch turbine torpedo tubes. The contract calls for a speed of 24 knots with a development of 16,000 horse-power.

The accompanying engraving affords a striking comparison of one of the Curtis turbines built for the "Salem" and one of the triple-expansion marine engines built for the battleship "Vermont." The turbine is of 8,000 brake horse-power and the reciprocating engine of 8,250 horse-power. A comparison of the dimensions and weights of the two engines is greatly in favor of the rotary type.

How the Polite Art of Dueling is Learned in France. Thus Garbed, Two Men Fire Clay Bullets at Each Other.

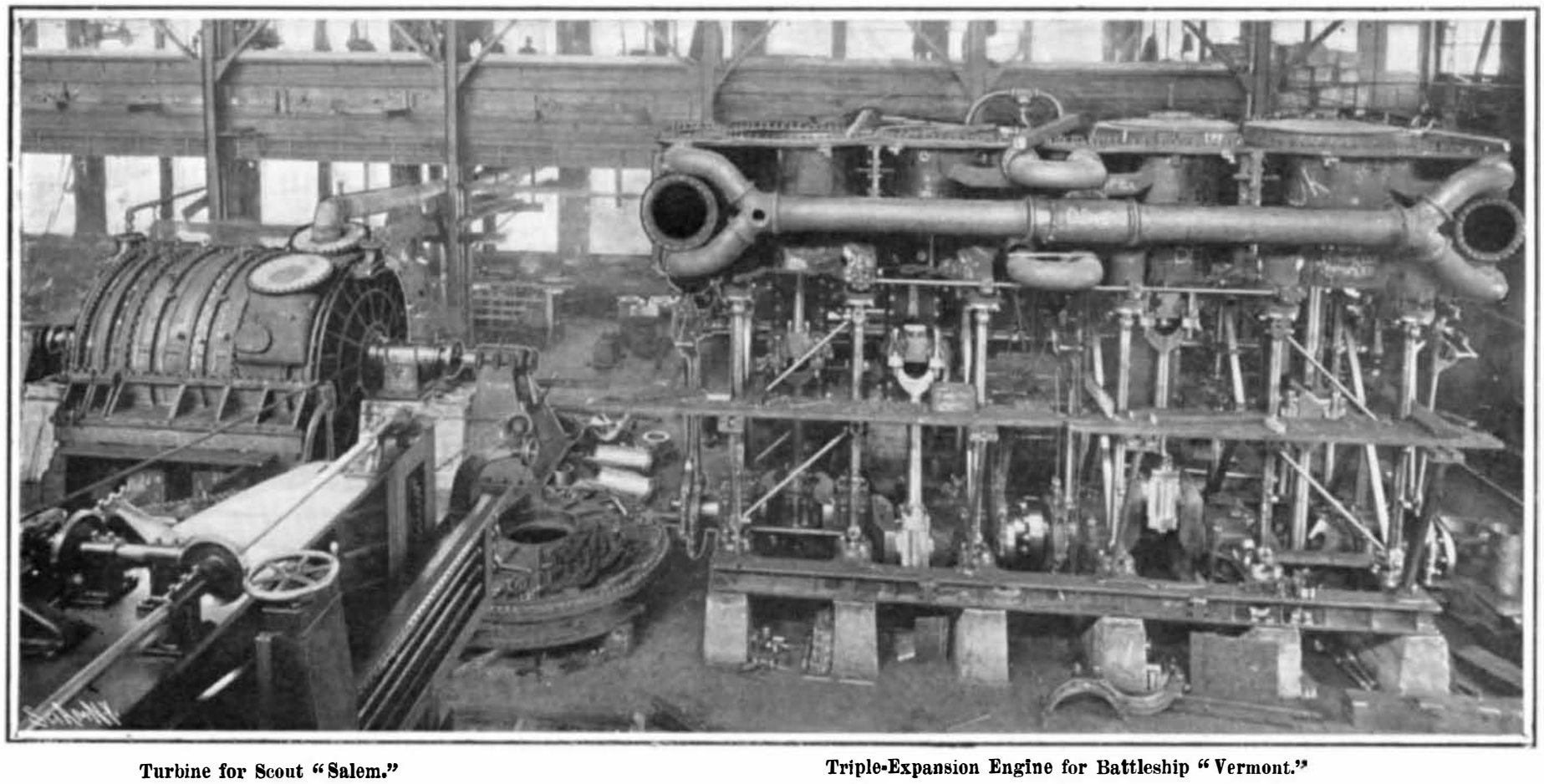
TURBINE ENGINE.

Length over all	16 feet 2¾ inches.
Width over all	13 feet 6 inches.
Height over all	12 feet 6 inches.
Length over stuffing boxes	14 feet 5½ inches.
Length over all, shaft	23 feet 7 inches.
Size	120 inches.
7 stage, R. P. M.	350
Weight	102 tons.

RECIPROCATING ENGINE.

Length over all	33 feet 6½ inches.
Width over all	11 feet 3 inches.
Height over all	21 feet 9 inches.
Length over all, cylinders	32 feet 9 inches.
Length over all, crankshaft	31 feet 1 inch.
R. P. M.	120
Weight	153 tons.

The above shows that on practically every point of comparison recorded, the turbine has an advantage and particularly in the matter of length, height, and weight, being only half as long, not much over half as high, and only two-thirds as heavy. The tests on an experimental turbine, built expressly for testing this type of turbine, show that in steam consumption there is a proportionately fine economy.



Turbine for Scout "Salem."

Length, 16 feet 2¾ inches. Height, 12 feet 6 inches. Weight, 102 tons.

Triple-Expansion Engine for Battleship "Vermont."

Length, 33 feet 6½ inches. Height, 21 feet 9 inches. Weight, 153 tons.

AN 8,000-HORSE-POWER CURTIS TURBINE AND AN 8,250 HORSE-POWER RECIPROCATING ENGINE BUILT FOR THE UNITED STATES NAVY.