

TRAINING SEAMEN.

HOW MEN AND BOYS ARE PREPARED FOR SERVICE.

Daily Duties of a Naval Scholar—Qualifications for Entrance Into the Schools of Instruction—Efficiency of the System.

HE efforts of the United States Government in late years to provide a navy for the protection of our commerce and the honor of our name have been measurably successful so far, at least, as vessels are concerned, and we are in a fair way to rank among the first of naval powers. There is one lack, however, which is even now severely felt. Ships alone do not make a navy; skilled seamen are necessary, and while we have enough to provide the nucleus of a formidable naval force, we have not enough to do more than respectfully man the vessels now afloat. The necessity for more is plainly apparent, and already the heads of the Naval Department are said to be consulting with reference to this end.

In this matter, we may profit by the experience of Great Britain, for, while this mighty power has the strongest mercantile marine in the world, from which it may draw recruits for the navy, it has also training schools for seamen, where boys are regularly brought up to do ship duty. The largest of these is in the Greenwich Hospital, perhaps the greatest institution in the world for the benefit of aged and disabled sailors. About 3,000 seamen, who, from one cause or another, are no longer able to follow their vocation, find shelter and care within the walls of this hallowed institution; but its inclosure also contains a training school, which, from the standpoint of worldly wisdom, is one of the most valuable schools in Great Britain.

The Greenwich Training School has two divisions, known as the Upper School and the Lower School. While the general purpose of both are the same, the Upper School has a specific end in view—that of training officers to command the British vessels. Each school has about 500 pupils. Those of the Upper School are the sons of officers, and are to receive a training to fit them for officers. They are nominated to the institution on a principle somewhat similar to that prevalent in this country with regard to our Military Academy. One hundred of these cadets are named by the First Lord of the Admiralty, and the remaining four hundred in turn by various officials connected with the Admiralty, with the Greenwich Hospital, or with the training school itself. The boys are taken at a tender age. They must be between 10 and 11 years, and of sound physique. The scholastic qualifications required are very slight, consisting only in an ability to read and write, and a knowledge of arithmetic through the first four rules. The main thing is a sound body, it being a maxim with the officials that, while a strong boy can be made a passable seaman even if unable to master the higher lines of study, a weakling is neither good on deck or at the desk. A general English training is given, but having an especial reference to the future life of the students. Mathematics is made a specialty; geometry and astronomy are taught exhaustively, but more with regard to practical work than to theory. The pupils are taught, for instance, to take observations with sextants, to work out the results of their observations, and are instructed in practical and marine surveying.

The Lower School has also 500 pupils, who are, however, selected from the sons of seaman and non-commissioned officers, regard being had in choosing boys for this department to the services of the father. Indeed, with regard to this selection there is no specific rule, for when a private seaman dies, leaving a number of helpless children, sometimes two or three of the number are appointed to the Lower School. The same physical conditions are required of pupils in this as in the Upper School, but a greater latitude is allowed with regard to age, for while they may be as young as 9 years, those of 12 and even upward, if other conditions are complied with, are not refused. All receive alike the elements of an English education and a special training designed to fit them for life on board ship, and at the age of 15 they leave the institution to enter upon regular service on board a British man-of-war. No special qualification, as in the Upper School, is required for admission, and it is said that a great number of the boys taken in are unable on their entrance to read and write, but such pains are taken and such is the method of training that the progress made during the few years they remain is said to be quite wonderful.

The boys of the Upper School, as already stated, are designed for officers, and abundant instances have occurred among their number of young men developing uncommon talent. More than one youth who has not yet attained his majority has been sent out from the Upper School to command a whaler, or even a merchant ship, and in most cases the results of such experiments have been entirely satisfactory. The Government offers every year a number of commissions in the navy as prizes for proficiency in the Upper School, and it is

men, yet there have been many cases where, through the force of merit, they have risen to posts of honor and distinction. They have the advantage over most seamen in the British navy of a nautical training, in theory as well as in practice, and this of itself is not to

torpedoes, boat-making and sailing. More than one-third of the time is given up to manual labor, for a seaman's school is really a manual training school of the most practical kind. In the sail-making shop he is taught to sew, to make knots, to splice ropes; in the

taught to wash the decks and do every kind of ship work from calking the seams to "fattening the cable." At eight bells, 12 o'clock, all assemble to a dinner of roast beef, potatoes and pudding, while for supper they have plain bread and treacle. Their education is not neglected, for they must observe certain school hours, but the practical training is considered to be the main object of their stay on board.

The system has been so effective that able-bodied seamen are now seldom enlisted directly into the navy, for the training schools have provided all that may be needed. But, to meet all emergencies that may possibly arise, a naval reserve has been formed, into which merchant seamen are admitted. Members of the reserve are paid an annual sum as a retainer to serve on board the Government vessels, and must be in readiness in time of war to enter the service of the British navy. Including the boys, this reserve numbers about 20,000 men, and as the total number borne on the ship's books is about 57,000, the available naval force of Great Britain is therefore nearly 80,000 men.

The naval schools have always been extremely popular, and generally have had more applicants than there was room to accommodate. There is a good reason for the preference shown by seafaring men for the naval service, for, although the wages are smaller than are paid in the commercial marine, in every other respect the men are better treated, fed and clothed than on ships devoted to commerce. The system of the reserve and training schools has also done away with the impression of seamen in time of war, and the press-gang, hunting the sea-coast and abducting men to serve as seamen, has become a thing of the past. The discipline of a man-of-war is extremely rigid. No despotism is so severe, but in general the men are justly treated. Seamen, as a rule, prefer for their sons the career they themselves followed, and thus by a system of training England has been able to keep the most formidable navy in the world in a high state of efficiency.—*Globe Democrat*

WISCONSIN'S NEW JUDGE.

John B. Winslow, of Racine, Appointed Associate Justice of the State Supreme Court.

Judge John B. Winslow, of Racine, who has been appointed by Gov. Peck to the Supreme bench of Wisconsin, is

PRACTICE IN HANDLING THE GUNS.

The daily life in both schools is much alike. At 6 o'clock a great bell rings, when all must instantly rise, and as only fifteen minutes is allowed before parade, the dressing must be done in a hurry. An officer in each ward is in waiting to repress any tendency toward disorder, and to see that every boy says

blacksmith-shop he learns all that is necessary to render him competent to do such work as may be needed on board a ship; in the carpenter-shop he is taught the uses of various kinds of wood, to do repairing and building, so that a boy will be able not only to build a boat but to show others how boats should be built.

In the gymnasium the incipient sailors are instructed in all sorts of exercises which may be useful in their future calling; they are taught to ascend and descend masts, head or feet first, while running, leaping, and vaulting are matters of course. The artillery practice is practical, with real guns, both breech and muzzle loaders; the pupils are taught to handle the piece, to aim and to fire; they are also instructed in the manual of arms and are drilled regularly with regulation rifles. The cutlass and pistol drill is also practiced, and they are taught to fence with swords, bayonets, and even handspikes, and thus at an early age acquire a proficiency with all kinds of arms. Swimming is a specialty, and regular instruction is given the boys, while frequent matches develop more than usual interest in the sport.

But the Greenwich schools are not the only places of training for the navy. There are a number of training ships, in each of which from 100 to 1,000 boys are instructed in all the duties of naval life. In the training ships the work is of even more practical character than in the schools, for the daily life of the seaman is lived over in reality, and, save for the schooling, there is no distinction between sea life and the course of training. Old vessels, which were once the terror of the French and the Spanish, are set apart for this use, and in them schools are established for such youth as desire to qualify themselves for naval service. They are admitted at almost any age above 12, the authorities, however, preferring them from 15 to 16½.

his prayers before leaving the room. Repairing to the play-ground, they form companies and march to the lavatory, where each company takes its turn at the tank. While some are washing, others are brushing, polishing boots, and putting them generally in good order, so that there is no idleness during washing hour, and as soon as all are ready the band strikes up a merry tune

and all march to breakfast. After a few minutes of intermission the companies form, without music, and repair to the school-room, where, with short intervals for recreation and refreshment, they are occupied during a large part of the day.

In addition to the usual routine of school work, there are lectures on mathematics, on practical optics, there are explanations and illustrations of the workings of steam machinery, and especially close study is made of every phase of geography. No study in the naval school curriculum is more carefully taught or more thoroughly mastered. The earnestness with which the youth who is to spend all his life on the land "bounds" States and countries is a trifle compared with the zeal with which instruction given him in geography, with this important difference, however, that while to the "land lubber" the study of the land is a matter of small consequence, to him who is to sail over the sea a knowledge of its coasts and by-ways is a matter of vital importance. Hence, the geography taught in the training school is the geography of the sea and of the coast, and when a pupil leaves that institution he is able to describe every headland on any frequented coast on the globe, to tell what harbors there are on any coast line, what rocks are to be shunned, what sands and reefs to be avoided, and where light-houses are erected for the safety of seamen. Gunnery, both theoretical and practical, forms a part of the sailor boy's training; he is taught not only to load and fire cannon but to study the laws of projectiles and to calculate how far a given amount of powder will throw a ball of a certain size, shape, and weight. He is taught military and naval chemistry, the constitution of gunpowder and of other explosives, the manufacture of

The applicants are required, with the permission of their parents, to sign an agreement to serve in the navy for ten years after becoming 18 years of age, and are then subject to all the requirements of naval service. The vessel which acts as a training school is kept in order and repaired by the boys them-

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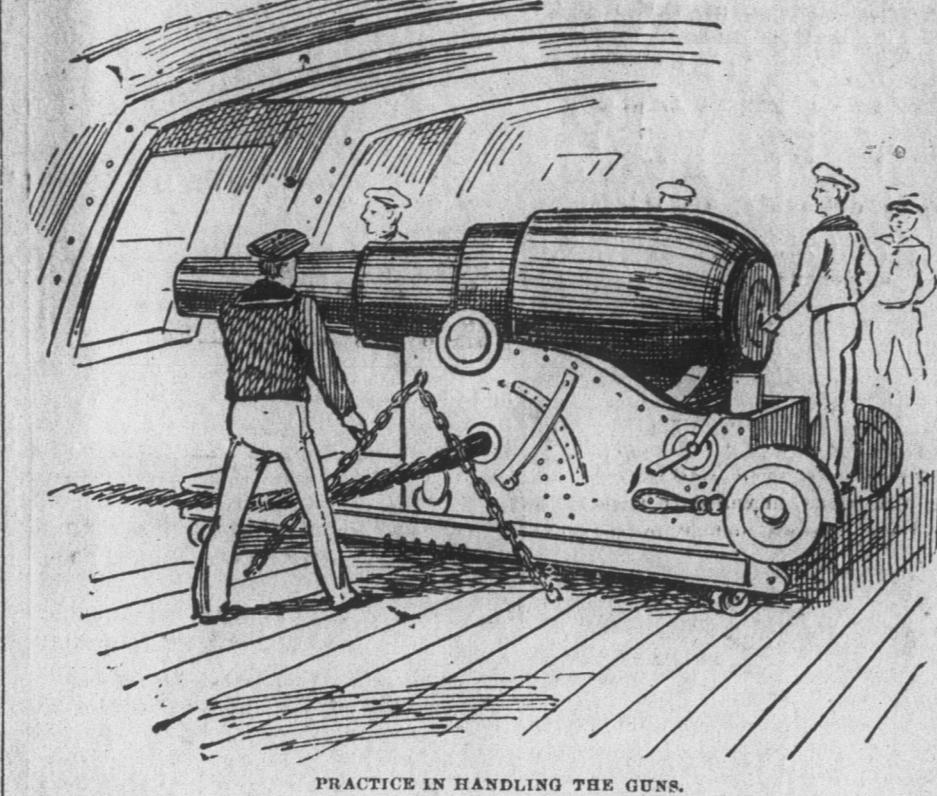
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selves under the direction of their officers, and all kinds of ship work is actually done. The boys are taught to furl sails, to handle guns, to fire salutes, are instructed in the manual of arms, are

taught to wash the decks and do every kind of ship work from calking the seams to "fattening the cable." At eight bells, 12 o'clock, all assemble to a dinner of roast beef, potatoes and pudding, while for supper they have plain bread and treacle. Their education is not neglected, for they must observe certain school hours, but the practical training is considered to be the main object of their stay on board.

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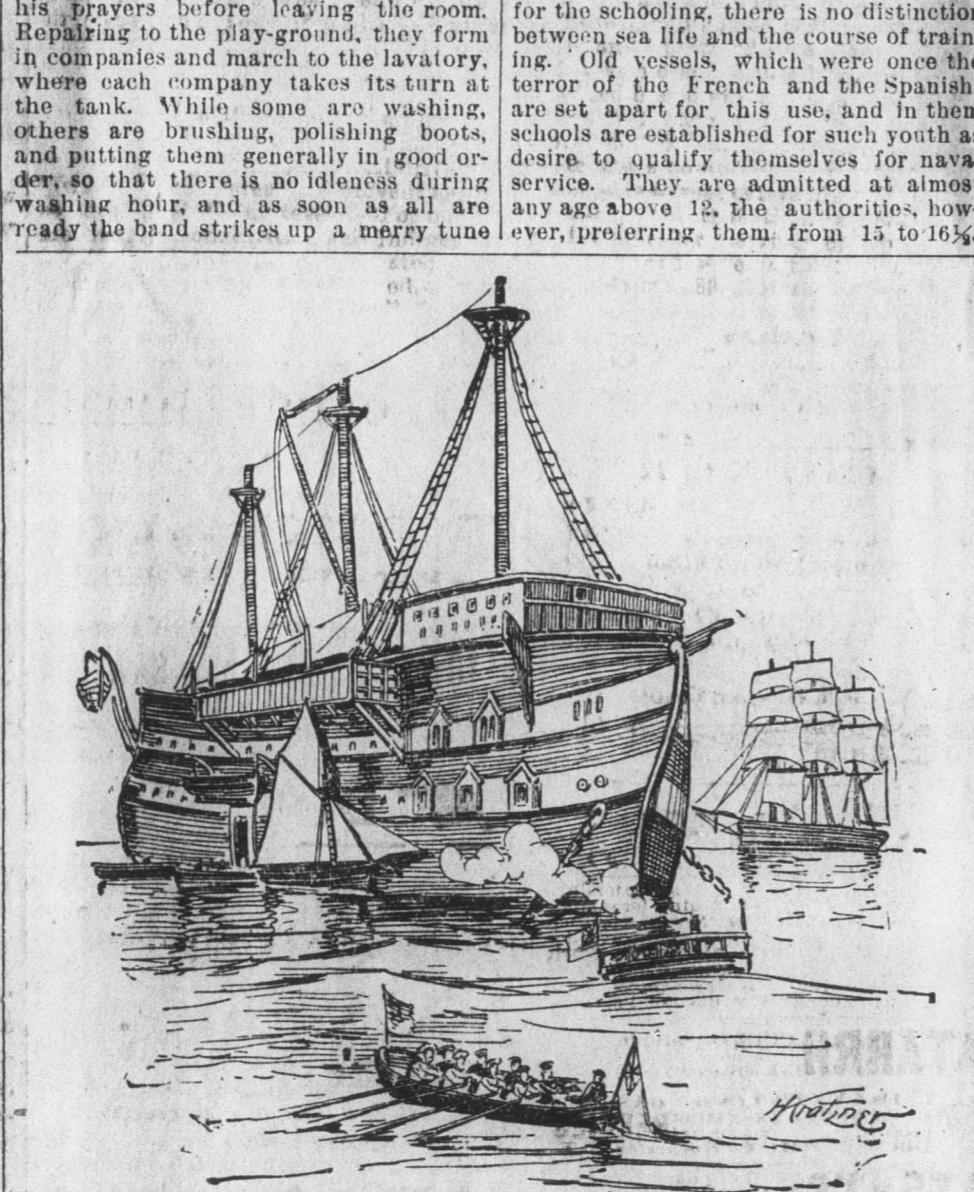
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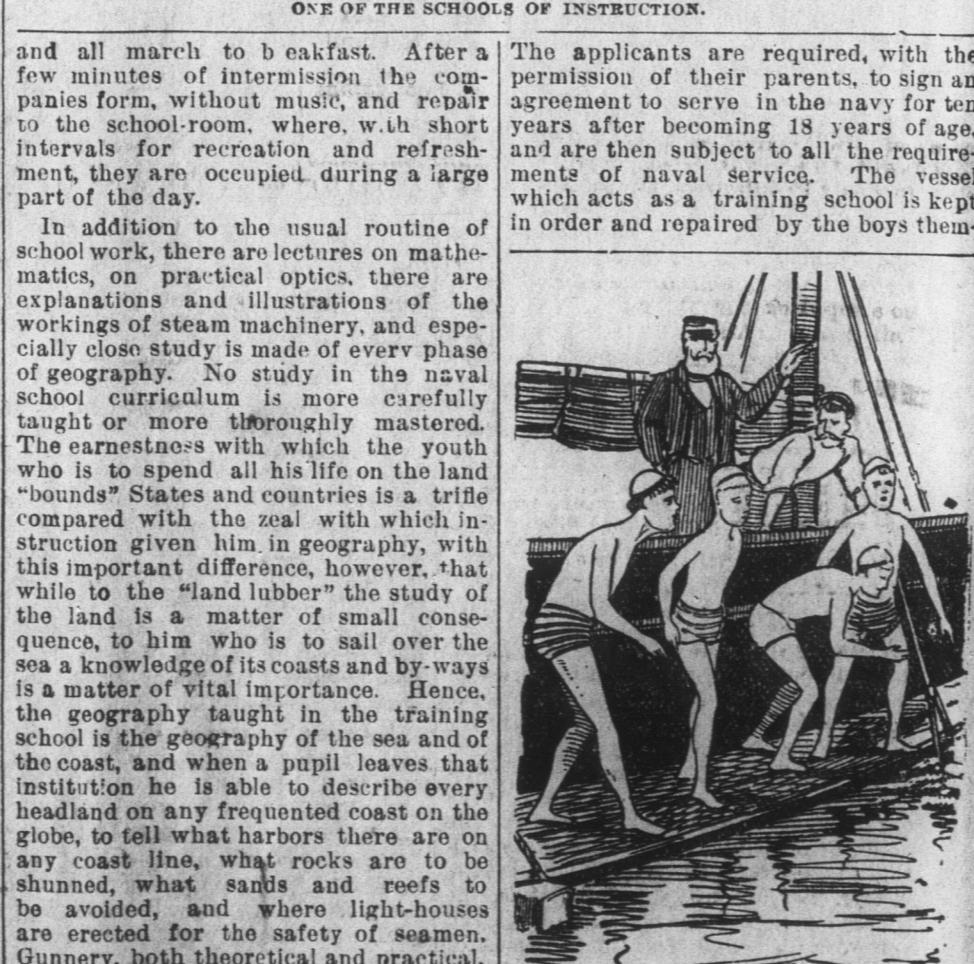
PRACTICE IN HANDLING THE GUNS.



SAIL-MAKING.



ONE OF THE SCHOOLS OF INSTRUCTION.

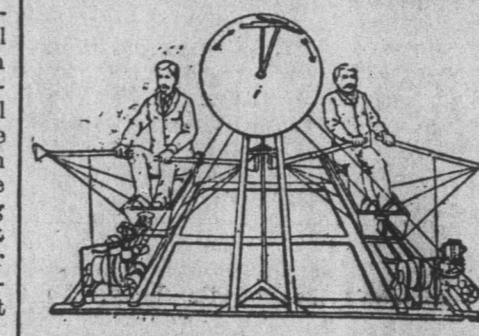


READY FOR A SWIMMING RACE.

BOAT RACING ON LAND.

A Machine that Operates Like a Boat on the Water.

The new machine consists of a cockpit, rigged and fitted like a shell; the oars are levers having the motion of sculls. All the motion of a pair of oars is attained without any more exertion than is used in propelling a boat through the water. The machine is rigged with the Kerns patent sliding seat and shoes. The latter have a



three inch adjustment, enabling them to be fitted to a long or short-legged man. The action is exactly similar to an ordinary pair of sculls. The outriggers have a spread of 4 feet 8 inches; while the slide has an extreme length of 28 inches. Fastened to the slide are two connecting rods, which are attached to a draw bar; the latter slides back and forth on a rail as the oarsman pulls his stroke through and recovers ready for another. At the end of the cockpit is a pocket wheel. At the head of the machine is another wheel of the same size and description. An endless chain passes over both pockets. This chain is connected with the draw bar, and the movements of the sculler in pulling through the stroke gives the rotary motion to the machine.

Connected with the upright shaft is a worm and system of gears. This operates a small clock-faced dial, which registers the distance the oarsman rows, the same as though he was rowing over a measured course. On the shaft, connected with the small dial, is a smaller pulley, having the same number of revolutions of the worm gear. A belt operates the hands on the big dial, which is constructed of canvas cloth, and enables the spectators to witness the exact position of the oarsmen in the contest. On the big dial are two hands like the hands of a clock. These hands are connected with each machine, and as the oarsman rows through the stroke the hands travel around the surface of the big dial, representing very closely the exact motion of a boat going through the water. Even the rocking movement which the ground swell causes is cleverly depicted.

Patents are now pending for an eight-oared machine, as Mr. Kerns claims that he can build the machine for either single, double, four, six, or eight-oared crews. The Harvard University Boat Club has ordered an eight-oared machine. The most essential feature of the machine is found in the fact that the crew can be got together and better work done than under the old style and form. The apparatus can be adjusted for either light or heavy men.

The well-known oarsman, James A. Ten Eyck, is going to get a partner from among the professional scullers, and they will start out after the holidays, giving exhibitions throughout the country on the machine with a well-known vaudeville troupe.

HOW TO FOLD A COAT.

Explanation of a Problem that Has Caused Much Profanity.

How many people know how to fold a coat? asks *Collier and Furnisher*. Here it is all in a nutshell, with no explanation necessary, except the illustrations:

Ravens in Alaska.

The Alaska raven is a fine-looking bird, as large as a turkey, and, upon closer acquaintance, a real handsome fellow, says the San Francisco *Chronicle*. His coat is indeed black, but of a black glossier and richer than silk and softer than velvet, while in a semi-shade the feathers are tinged with that peculiar color so often seen on well-preserved blue-black bronze. It is very funny to see those birds holding, as it were, a conclave. Ten or a dozen alight on the ground and walk to the meeting place with a stately, erect step, their every movement cool and assured.

Then an old bird steps gravely into the middle, and the meeting begins with a series of guttural and harsh croaks, which gradually swell in volume until the entire lot of birds have joined in the debate. Along comes a dog, and for him they scatter, resuming their positions when he passes, until the meeting again terminates, and then fly off to the beach and hills. These birds are seldom killed, unless it be by some sailor in pure wantonness. If you examine the bills of these ravens, the peculiar construction is remarkable. They are a combination of chisel, scissors, dagger, and gimlet. The bill forms an important factor in the raven's existence, for he has to dig on the beach for clams, bore the hard shell by repeated chopping, and again in pure mischief he will tear and break anything that his bright and unerring eye lights upon.

The natives from Yukat Bay, through the network of islands as far as British Columbia, have an ancient legend that the raven was the bird that brought light from darkness when the world was created. On this account they venerate it, and the totem of the raven is regarded as denoting the most illustrious descended family.

Two days before Eyrard was guillotined he sent for a surgeon and asked all about how it felt to have a fellow's head sliced off, and how many seconds he would live after the ax descended. When told that he would lose all consciousness in five seconds he timed them on a watch and expressed himself as satisfied.

Rev. Plunk Plunk on Heat. Some ob de membah ob dis congregashun, deah breddern, hab compained ob de coldness ob de air in de church on Sunday mawnins. Now, I claim dat de only heat dat should be allowed in church am de fiah of religion, and ebery man in dis church ought to get up enough religious fiah in his heart heah on Sunday to carry him fru de week wifout an overcoat.—*New York Herald*.

Talk's cheap, but when it's backed up by a pledge of the hard cash of a financially responsible firm, or company, of world-wide reputation for fair and honorable dealing, it means business!

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Talk's cheap, but only "Discovery" is guaranteed.

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ONE ENJOYS

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