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## THE NAVY'S NEEDS.

The condition of the navy is attracting more attention than it has received at any previous time since the close of the war. Naval officers and a few legislators have long known-and the fact is now generally admitted by the press and the people—that we have not had during the last twenty years a single sea-going ship that would have had a hope of victory if pitted against any of the first class warships of other nations launched during that time. During those twenty years, but one ship built by or for our government has been any more worthy to be called a modern warship than an old-time sailing frigate of the Constitution class would have been. This one exception was the Trenton, which, though unarmored and none too fast, was, when she was launched, a fairly efficient cruiser. Every dollar spent for construction or repairs outside of the Trenton has been wasted in the creation or perpetuation of ships utterly useless for war purposes. Most of these craft would not have rated high in their respective classes thirty years ago; yet in the face of all the improvements that have been made in other navies, we have gone on tinkering with these old hulls filled with mere scrap metal, called-by courtesy only-boilers, engines, and batteries. Within the past four years, four new ships have been designed and nearly completed, namely, the Chicago, the Boston, the Atlanta, and the Dolphin.

It is unnecessary to go into the controversy as to what measure of success or failure has attended the practical working of these ships, two of which are in commission, while the other two are nearly ready for their crews; assuming, even, that they will accomplish, in the matter of speed and seaworthiness, all that their specifications call for, they are still unsatisfactory specimens of naval architecture, and are costly but inefficient additions to the service. They are not armored for resisting heavy guns, and they have not speed enough for light cruisers. It is now proposed to build four additional steel cruisers, not armored, the proposed tonnage and speed being as follows, respectively: One of 4,000 tons, highest speed 18 knots; one of 3,730 tons, highest speed 18.9 knots; one of 1,700 tons highest speed 16 knots; one of 870 tons, highest speed 12 knots. It is unnecessary to go into further particulars regarding these vessels, for the foregoing figures are sufficiently condemnatory without criticising the defects of the battery and the particular style of machinery. The two vessels having high speed are too large, while the smaller two are ridiculously slow.

The United States navy ought not to be intended for large offensive operations against land fortifications and heavy ironclads. So much has been admitted by the navy department in the construction of the last four and in the plans of the next four new ships. They are not armored for heavy fighting. They are called "cruisers," and while doubtless they can "cruise" well enough from port to port in time of peace, they ought to have been constructed with special reference to the requirements of war. They ought not to be fighters, but fliers, having the greatest speed and coal capacity consistent with a small but powerful battery. Except for coast defense, we do not need ironclads, but Alabamas.

Now, there is no objection to the speed of the two largest of the new cruisers, namely, 18 and 18.9 knots respectively. If that speed could be maintained for ten days, and if they could carry coal enough to last that time, they would be model "cruisers," for they could overhaul anything afloat; but unfortunately that is not intended to be their sustained speed, and it is not likely that even 15 knots could be kept up for any great length of time, or that they could carry sufficient coal for long steaming at great speed. Consequently, not being efficient as armored fighting ships, and not having even sufficient speed to escape from the firstclass armored ships of other nations or to overhaul the fast merchant steamers whose capture would be

fleet just outside our ports in case of a blockade or bombardment; but it is becoming more and more questionable whether these would be absolutely essen. tial to our defense. In their place, a swarm of torpedo craft, Ericsson's Destroyer, and dynamite-gun carriers could be provided at very moderate expense, and there are few naval officers who do not admit that they would rather fight ironclads than torpedoes.

Finally, the navy wants to forget some things and learn some others. It especially needs to forget that vessels ever were propelled by the wind. If every manufacturer using a steam engine insisted on erecting a windmill over his workshop to assist the steam power below, he would be regarded as a "crank;" yet that is practically what many of the older naval officers insist upon on board ship. Because sails and spars were once necessities, they cannot see that they can be dispensed with now. They need to forget that it is necessary to follow the lead of European navies in preparing for a game of war. All the pretty little rules by which foreign experts prepare themselves to meet their European enemies may well be ignored and dispensed with, just as we always have ignored them when actual fighting was to be done. Modern naval warfare-in theory, at least, for there has been precious little practice-is beginning somewhat to resemble the middleage tournaments in armor. The ships are now cuirassed instead of the knights, but the rigidity and cumbrousness of the combat are likely to be marvelously similar. We want none of this kind of training. We can get along without the armor and without the clumsy rules that its use necessitates. Let our naval officers study the weak points of their possible adversaries to avoid-not to copy-them, and exercise their ingenuity in inventing devices for resisting and repelling any attack that may be made on us.

The personnel of the United States navy-as universally admitted by foreign officers—has no superior in education, originality, quickness in device, and promptness in execution. If the government will only provide the right kind of ships, there need be no doubt that a good account will be rendered of them.

## INCIDENTS IN BIRD LIFE AT THE PARK.

The curious behavior of a sheldrake in the Cu. tral Park Zoological Gardens has puzzled Superin tendent Conklin and the keepers, and is attracting much attention among visitors. When the two sea lions were brought to the Park recently, this sheldrake was the only one among all the birds in the little inclosure outside the lion house, where the sea lion tank is, that took any interest in the new comers. The sheldrake comes from Australia, where there are not any sealions, and is, therefore, unacquainted with these monsters. Perhaps to this fact may be attributed the strong interest he took in them; for, ever since they were dumped into the tank, he has seemed to regard himself their special guardian, and spends the hours of each day on or near its edge.

He stands like a sentry, usually on one leg, and at first attacked the other birds, when they approached, with such fierceness that they seem now to have a wholesome dread of him, and at times, when very thirsty, sneak up to the basin, take a hasty sip, and scurry away as though they had come to the belief that the tank and its waters belonged exclusively to the sheldrake. Now, there are in this inclosure many large birds, such as the pelican, stork, and bitternbirds able to defend themselves; but, strange to say, they submit meekly to the assumption of proprietary right by this little wood duck, as if by some unseen, but potent, influence directed. The ponderous, sleek, and slow moving sealions come up to the surface now and then, watch their little champion drive away intruders, and then, after blinking, sleepyeyed, for a few moments, fall over lazily into the water and disappear.

The sheldrake is not known among naturalists as desirable, it is difficult to see what effective service an aggressive bird, and hence to see him fly furiously they could perform. As for the two smaller ships, a at a great pelican, drive him from the field, and then maximum speed of 12 and 16 knots respectively makes send a long-legged sand bill crane scampering after in them, of course, even less satisfactory than the larger evident alarm, is a curious sight. While the sheldrake pair. It seems as though-following the example set will allow no other bird to approach the sea lions by

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in the Chicago, Atlanta, etc. - the Navy Departday, he relaxes his vigil after nightfall, when the sea ment proposes to build ships that can neither fight lions and birds repair to the little house near the tank to sleep, and there is a tacit understanding that the nor run.

other birds may then approach. It is apparent that we must keep up a considerable

naval establishment for two reasons : First as a navy This sheldrake is of the sub-family Analina and of the genera Tadorna (Leach) and Casarka (Bonap.). The cannot, like an army, be created at short notice, an effective nucleus of trained officers and men must be species are to be seen on the sea shore as well as on maintained at all times; second, even in time of peace the lakes, feeding on marine plants, crustaceans, and mollusks. The note is a shrill whistle. there are barbarous or semi-civilized nations with whom

no arrangement is effective unless the power to enforce Another interesting phase of bird life has been develour rights is made clearly apparent. Therefore, we need oped in the big cage on the eastern side of the arsenal, where a scarlet ibis (*Ibis rubra*) has taken a strong disa moderate number of cruisers to keep officers and men actively employed, and to visit the ports of all semilike to the note of the whooping crane (Grus americana); and, as if in furtherance of Oscar Wilde's sugcivilized and barbarous nations frequently. The ships gestion as to an art police which should prevent disshould not be so large as to be unduly costly to build and to keep in commission, but they should have high cordance in music as well as deformity in other branches, this ibis essays forcibly to restrain the speed, large coal capacity, and a very few long range whooping crane from uttering his unmusical note. guns. For coast defense, a few very heavily armored ships of the Monitor type, capable of going to sea in One day last week, the crane got to work in real ordinary weather, might be desirable, to meet a hostile earnest, and whooped away for nearly half an hour,