

COLLIER'S WEEKLY

AN ILLUSTRATED
JOURNAL OF

ART LITERATURE &
CURRENT EVENTS

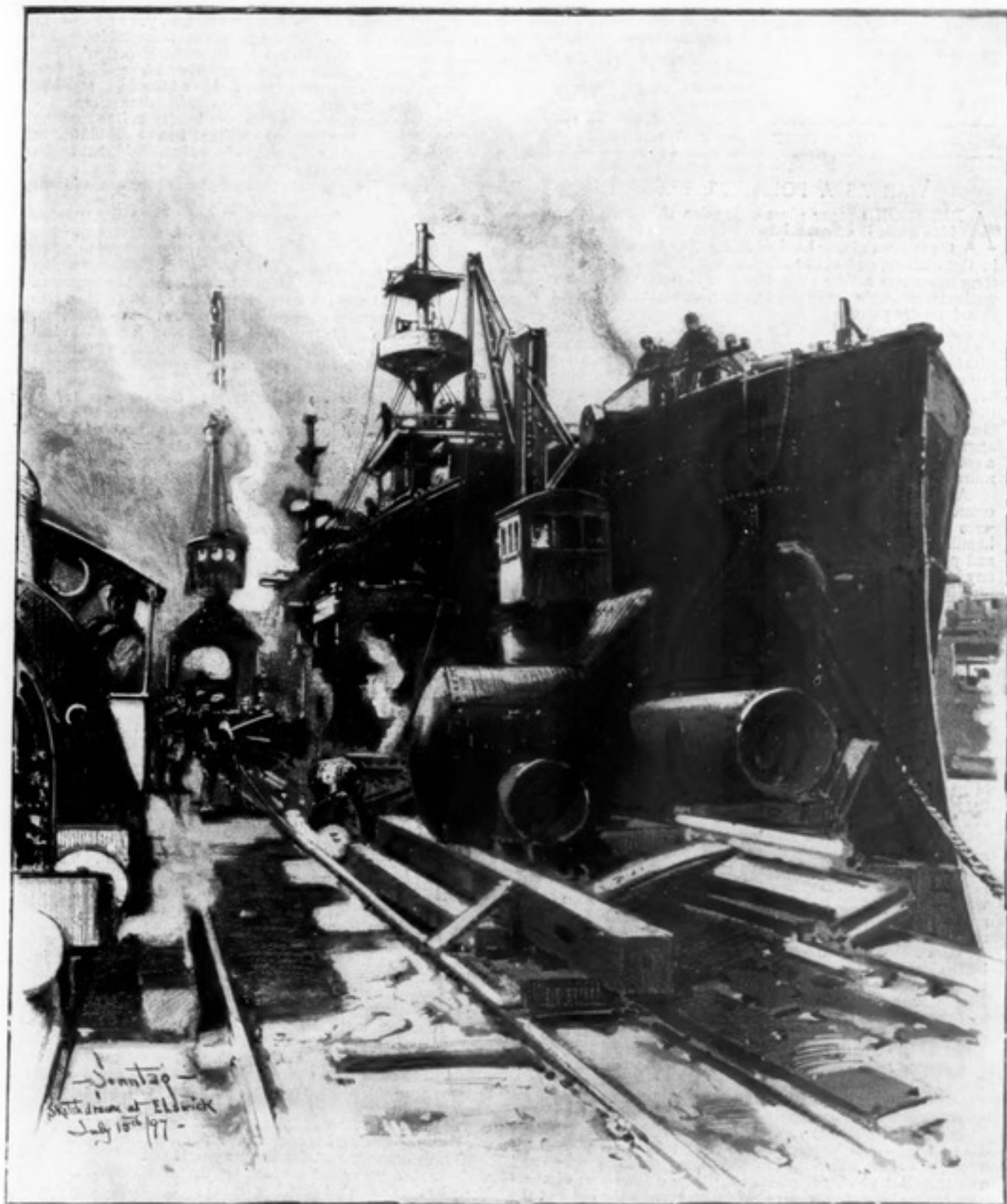


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VOL TWENTY NO 25

NEW YORK MARCH 26 1898

PRICE TEN CENTS



THE NEW UNITED STATES CRUISER "AMAZONAS"

From a sketch made in the Elswick shipyards in July, 1897

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NEW YORK CITY

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THE EDITOR COLLIER'S WEEKLY NEW YORK CITY

ROBERT J. COLLIER, EDITOR

NEW YORK MARCH TWENTY-SIXTH 1898

WAR AS A POLITICAL BLESSING

A RICHMOND paper gives expression to a very prevalent idea when it congratulates the nation on the effect which the menace of war has had in drawing together all parties in the country, and obliterating sectional lines. It says that there never was a time since the close of the late war when all sections were so closely linked together, or when the spirit of '76 so universally prevailed.

No observer can doubt the fact that sectional and local interests have of late been prevailing over national interests, and that in this respect the state of the country now presents a striking contrast to the state of the Unionist part of it during the War of Secession, when all minor differences were merged in the struggle for the Union. It was the wail of a patriot, the late General Butterworth, that the Republic had become a mere aggregate of potato plots and of cabbage grounds. There was a notable instance in the late controversy between the American railroads and their foreign competitors.

A genuine restorative of patriotism, therefore, might be welcome. But the moral world would be greatly out of joint if it were possible to cure our own defects as citizens by killing, humiliating, and ruining other people. To produce a good moral and political effect the war must at least be righteous; hardly any but bad passions can be excited by a war of aggression, especially when it is made against the weak. The war of '76 was a righteous war. So was the War of the Netherlands against Spanish tyranny, and the War of the Protestant States against the Papal Powers which ended in the defeat of the Armada. These all suspended internal discord while they endured. Yet even in these cases war acted rather as a temporary relief than as a permanent cure. Before the close of Elizabeth's reign party, religious and political, was again at work; it raged through the reign of her successor, and in that of his son broke out into violent revolution. Nor had Dutch liberty been long established against the foreign oppressor when it was succeeded by the fury of domestic strife. War, in fact, in any cause, can hardly fail to excite passions which, when they have ceased to expend themselves in the battlefield, are apt to seek some other vent.

By the victories of the Plantagenets in their French wars the spirit of the English nation was exalted to the highest pitch, and internal quarrels between factions and classes were for the time merged in the common glory. But the victories of Edward III. were followed by the insurrection of the Serfs, the faction fights among the nobility which filled the reign of Richard II., and the revolution which subverted his throne. The victories of Henry V. were followed by the Wars of the Roses, largely brought on by the ferocity and love of plunder contracted by the English in their predatory invasions of France. After the triumphs of Marlborough came the bitter struggle between the Hanoverians and the Jacobites, with two outbreaks of civil war. Chatham avowed himself a lover of honorable war. He is lauded by English historians for having by his policy restored the patriotism of the nation and raised it above faction and corruption. But again we must ask what followed. What followed was a renewal of faction in its most virulent, and of corruption in its grossest, form. The struggle against the devouring ambition of Napoleon was inevitable, and therefore righteous. While it lasted the conflict suspended faction or reduced it to a minimum, at the same time, be it observed, suspending progress and reform. But no sooner was it over than discord and disaffection broke out, and repressive legislation became the order of the day, while faction resumed its ascendancy, and in the struggle for Parliamentary Reform brought the nation to the very verge of revolution.

The War of 1812 is regarded with complacency by some American historians as having killed sectional differences and

completed the unity of the Republic. Yet the war itself was the parent of a division which gave birth to the Hartford Convention, while out of it came the ascendancy of Andrew Jackson and the reign of political violence associated with his name, the violence being perhaps partly bred of the war.

Napoleon made war on principle, as an antidote to political revolution, saying that what France wanted was peace (internal peace) and glory. For a few years his policy succeeded; we know at what cost to humanity, not only in that generation, but in the generations that have followed; for to the Napoleonic Wars is mainly traceable the monstrous and devouring militarism of the present day. But what was the political result in France? Not domestic peace and patriotic union, but a series of furious party conflicts and violent revolutions which is not closed at the present hour.

War, righteous or unrighteous, will of course call into play the military qualities, not valor and endurance only, but discipline, a habit inferior to the free love of law, yet necessary in our stage of civilization. At the same time it must kindle barbarous passions and steel the heart. In one of Napoleon's campaigns we are told six thousand naked bodies, stripped by plunderers, were at once exposed to view. More hideous, if possible, were the sights of the Russian campaign. Meantime every hamlet in France was mourning for the boys torn from it to feed the Moloch of War. The people who delight in war should carry their thoughts not to the splendors of the battlefield, but to the hospital or to the cottage hearth, which, little ambitious of glory, is longing and praying in vain for the return of the son who will come home no more.

Everybody knows the passages in Tennyson's "Maud," which express with the utmost fire of his poetry the idea that war is a political blessing, that it causes the heart of a people to throb with one desire, that it exalts the shopman into a hero, turning his measure into a sword, and puts an end to the supremacy of Mammon. What was the war? It was the Crimean War, into which the nations were dragged by three men, Louis Napoleon, Palmerston, and Lord Stratford de Redcliffe, each of whom had a personal object, and the fruitlessness of which was within a few years acknowledged by the statesmen who had taken part in it. Party strife, suspended for a moment at the commencement of the war, broke out again before its close and overturned the Coalition Government. How far the Crimean War was from permanently establishing political concord the subsequent history of British politics has shown. Nor did it produce any moral or social improvement of a lasting kind. The shopman remained a shopman, though he might at his music-hall join in the chorus of Jingo songs, nor did the worship of wealth decrease.

"There is," says the Richmond "Journal," "no occasion for strife in this land, and our troubles have grown largely out of a misunderstanding." The obvious remedies then are a better understanding and the exercise of political self-control. If there is discord in the household, it may be suspended for the moment, but it will not be permanently allayed by an affray with a man in the street.

Nothing is here said against defensive or righteous war; nothing against the character and qualities of the soldier as they are displayed in any war. The doubt expressed is whether war should be courted or embraced as the means of restoring concord to the nation.

GOLDWIN SMITH.

THE QUESTION OF COAST DEFENSE

THE appropriation by both Houses of Congress of \$50,000,000 "for national defense" has reawakened interest in the long vexed and much-mooted question as to the most effective methods of safe-guarding our coast against invasion. The expenditure of so large a sum, and its apportionment to the various branches of the service in the light of an especial emergency, suggest several considerations. Should the present "war scare," deprecate its manifestations as we may, bear no other fruit than that of causing the country at large to appreciate, in a wide sense, its responsibilities, and to prepare intelligently for just such contingencies in future as confront us now, then indeed will it have proved a blessing in disguise.

When, as was not long ago the case, such a representative body of business men as the New York Chamber of Commerce so far departs from its ordinary procedure as to draw up resolutions urging upon the Government the necessity of pushing forward our coast defenses, we must admit that the subject is brought forward, not for political purposes, nor with the design of causing fluctuations in the stock market, but by a realization of the urgent need of the nation and by a sincere and patriotic desire of placing the country in a position of security.

Our defenseless condition has for years been well known, and we have shut our eyes to the fact; but the serious aspect assumed lately by the Cuban question has forced us to awaken to our neglect. It would therefore be not inopportune if we should glance at some sides of the problem.

First: the optimist maintains that we are a peaceful nation and have no need of warlike preparations. Facts do not bear this out. Since the Declaration of Independence we have had

four wars—one in every thirty years—and have spent one-seventh of our existence as an independent nation in a state of war—one day in every week for one hundred and twenty years. In the Civil War alone we lost more men in battle than has England in all her wars since the time of William the Conqueror.

Again, he will urge that it will be time enough to fortify when war has been declared. This hardly needs refutation. In the last one hundred years there are but three cases in which a formal declaration of war preceded hostilities; on the other hand, there are fifty-three recorded instances where hostilities were begun by a European nation without previous declaration. Furthermore, modern wars are short and sharp. The average duration of the five great European wars from 1859 to 1870, from the declaration of war to the striking of the decisive blow, was but seven weeks. When it is remembered that our largest guns require now about three years to complete, the folly of deferring preparation to the last minute is evident.

It is true that our late war lasted four years, during which there were put into the field, from North and South together, some four million men; but this should furnish no criterion, since, so far as preparation, or rather lack of preparation, went the two sides were equal.

There are others, who, having read "The Great War Syndicate," and Jules Verne, give free reins to their imagination and, pointing with conviction to the case of the *Monitor*, declare that we have nothing to fear, that in the hour of need Yankee ingenuity will come to the front with some submarine or aerial engine of war by which we will find a short cut to victory. With the Holland submarine torpedo boat we appear to have such almost within our grasp, but as yet we should not feel too secure. In our late war, the Confederates constructed a submarine boat driven by a propeller kept in motion by the labor of eight men. The rumor of this invention caused the Union officers blockading Charleston to draw off in dismay. After drowning three crews in succession, she finally sunk the steamer *Housatonic* and disappeared herself forever. The Turks, Spaniards, French, and other nations have submarine boats.

There is another class who object to present expenditures for fortifications on the grounds that such works are in a transition stage and consequently might become obsolete ten or twelve years hence. Such reasoning would be the death-blow to all human progress. He who never buys this year's bicycle because next year's will be so much improved, continues to trudge along on foot as did his primitive ancestors.

Nevertheless, this possible humiliation or crippling is to be guarded against, not by a navy alone, nor by fortifications alone, but by a judicious combination of the two.

Our unprotected coasts have not always been a subject of reproach among nations. In 1816 fortifications were begun at various points from Maine to Texas, and in 1860 in efficiency of seacoast fortifications we were not surpassed by any power. The four years of civil strife left us surfeited with war; we therefore, in the next twenty years of the world's progress, fell behind in military matters. There was an awakening in 1885. The "Endicott Board" was created by act of Congress and empowered to look into the condition of our coast defenses and report upon the points which most urgently demanded protection. It was also to recommend the system to be employed. Congress has based our present policy of coast defense upon the recommendations of this board.

In brief, it showed that we have upon the Atlantic, the Gulf and the Pacific some 5,000 miles of coast line, and along this coast thirty ports requiring fortifications more or less extensive. Of these, fifteen are of such importance that the nation at large has much at stake in their preservation. There are some seventy minor ports requiring slight defenses. There was recommended, in round numbers, an expenditure of \$100,000,000 for land defenses and armament, and \$30,000,000 for coast-defense vessels, torpedo boats, and submarine mines.

The vessels of the British navy built in the last twenty-five years represent a first outlay of \$225,000,000. To maintain this fleet in repair, to pay wages and pensions, and to provide coal and food, the estimate for the current year is \$125,000,000. It is thus seen that the drain upon the British public for one year on the score of their navy would put our coasts in a condition of safety for at least a generation.

There are certain military critics who invariably sniff when they hear the word fortification. They expatiate upon the triumph of the modern gun over these inanimate defenses and delight in depicting to their hearers the ease with which the walls of existing fortresses could be pierced from side to side, and their consequent inability to subserve the purpose for which they were built. Our present small-arm can pierce the bodies of three men at a distance of 2,000 yards. Do we for that reason decide that in battle we should no longer employ men but some other animal of tougher integument? Moreover, are these critics justified in decrying the works of brick or stone? It appears not. A substance of universal occurrence along the seashore is sand. It is the material of all others which offers the greatest resistance to the penetration of projectiles. A mound of it thrown up against the masonry of our despised fort affords more protection than steel armor of many times its value. A fort built thirty years ago can thus be converted into a material

element of defense. What can be done with a vessel built thirty years ago?

Our history bears testimony as to the value of these forts. Fort Sumter, three-stories high, built of brick upon an artificial island in Charleston Harbor, was attacked on April 7, 1863, by Admiral Du Pont with nine ironclads. In forty minutes he was compelled to withdraw; all of his vessels being more or less disabled, and one, the *Keokuk*, sinking and falling into the hands of the Confederates.

In our plan of coast defense we propose to attack hostile vessels from three different directions: from beneath, from the side, and from above. The attack from beneath will be delivered by submarine mines and automobile torpedoes. The mines consist of a network of torpedoes spread under water across the path of the vessel and exploded automatically or at the will of the operator. They are arranged on the principle of hotel annunciators and indicate at some central station the particular torpedo touched. Thus attempts to tamper with the torpedoes under cover of darkness would be detected at once. The automobile torpedoes are either launched from a shore station or discharged from a tube carried by a torpedo boat.

The attack from the side will come from rams, from other vessels, preferably of the monitor type, and above all from high-power rifles. The old manner of mounting guns so that they project above the parapet can no longer be employed; not so much on account of danger to the weapon itself—for, although it is a fair target, experience shows that it is rarely hit—but because the machine guns, with which all war vessels are plentifully supplied, would sweep the gun with such a leaden hail that the cannoniers would be forced to seek cover. There are two methods of protecting the gunners, both of which we are to employ: the first, by the use of revolving turrets; the second, by the use of disappearing carriages. The turrets are each to contain two heavy rifles, are to be placed in some commanding position, and, since they are not to be carried on the deck of a vessel, the question of weight need not be considered; they can therefore be made so thick that no projectile can penetrate them. The ammunition and men are safely housed in subterranean chambers.

The disappearing carriages are built in accordance with any one of a number of mechanical principles; but, whatever system be employed, the practical operation is the same. In front of the gun is an immense shield of sand and concrete presenting no projection or angles which would reveal its location. Behind this the gun lies hid. It is loaded, given the proper elevation and direction, rises, discharges its projectile, and the recoil returns it to its hidden position.

To test the value of such mountings the English conducted experiments at Portland in 1885. A pit was dug in the natural slope of a hill and in this pit a wooden model of a large gun was mounted upon a disappearing carriage. It was arranged to appear for half a minute at intervals of three minutes, emit a puff of smoke and disappear. The *Hercules* at 800 yards fired in ten minutes 6,910 rounds from the machine guns and 29 rounds from its 6-pounders. The gun stuck at the seventh minute and could not be hauled down. In spite of this it was struck only sixteen times, and had it been steel the effect would have been simply to scratch the paint. Besides this, 28 10-inch shells were fired at it from a distance of 2,500 yards and no hits were made, the shell striking from 300 yards short to 300 yards over, and from 120 yards left to 130 yards right. This was under circumstances unfavorable to the gun, since it did not return the fire. A fixed gun subjected to a similar test was struck over 200 times.

One gun mounted on land is regarded as a match for two, or even three, on shipboard, stability of platform being a principal reason. Suppose two riflemen engaged in combat, one on foot and the other mounted. It would be superfluous to state with which the advantage lay.

The third attack, the attack from above, will come from the rifled mortars. The vessel with her armor and guns has all the weight she can carry. Should she attempt to add to the thickness of her decks to guard against an overhead attack she could no longer float. These mortars are placed in pits in groups of sixteen and are fired in volleys. Their shells weigh 1,000 pounds and have a range of five miles. In a trial of such a battery two years ago, at a range of five miles, the first sixteen shells fell in a rectangle of 200x150 yards, the second sixteen in a rectangle of 130x100 yards. We have also several batteries of dynamite guns, but their value is still a matter of debate.

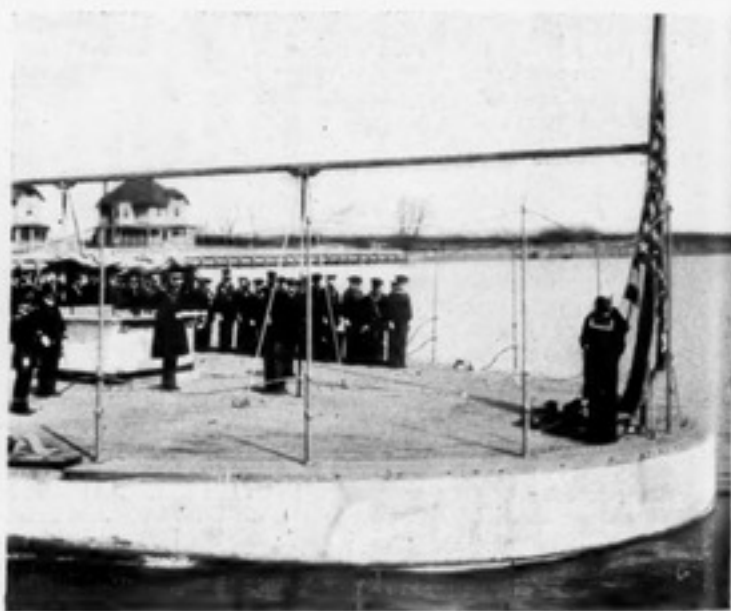
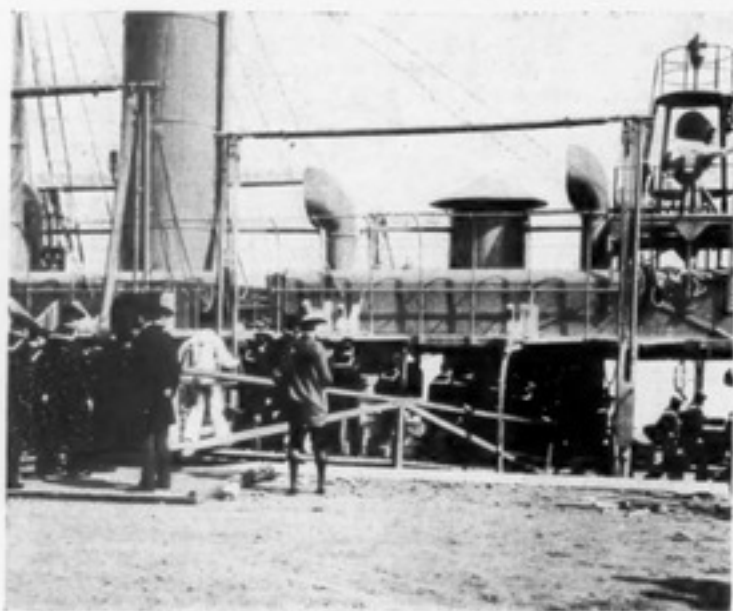
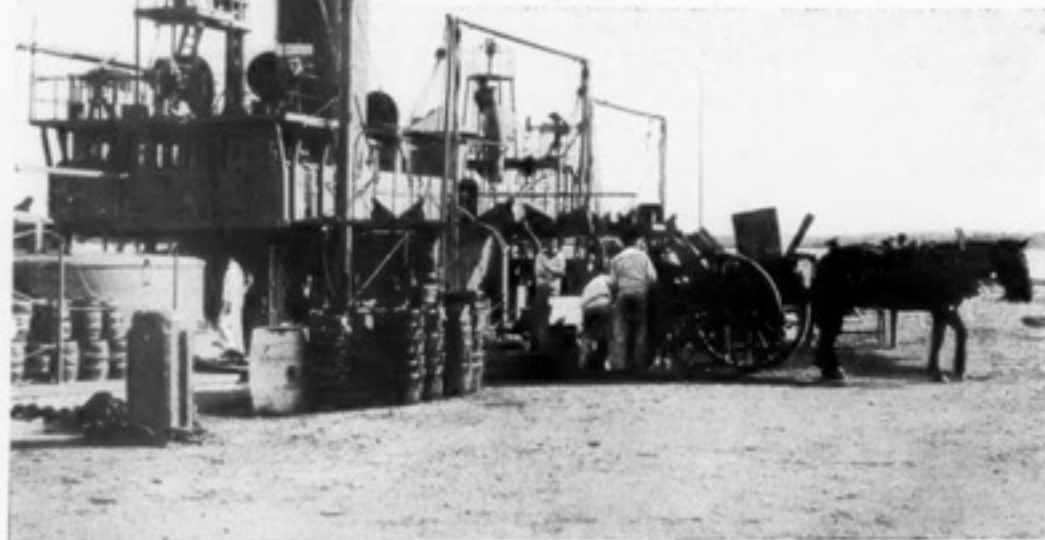
The coast being thus rendered reasonably safe, it remains for an adequate but not excessive navy to co-operate in the general scheme of defense.

When all has been said and done, fortifications are but inert masses of earth, of stone, of steel. They become elements in war only when animated by flesh and blood, and, in reckoning their strength, stout hearts are more to be considered than thick walls, and weaknesses of structure are compensated for by the courage arising from the consciousness of fighting for the right and for one's country, for which causes alone may the American soldier be called to take up arms.

WIRT ROBINSON,

First Lieutenant, 4th U. S. Artillery.

Instructor in Military Science to Harvard University.

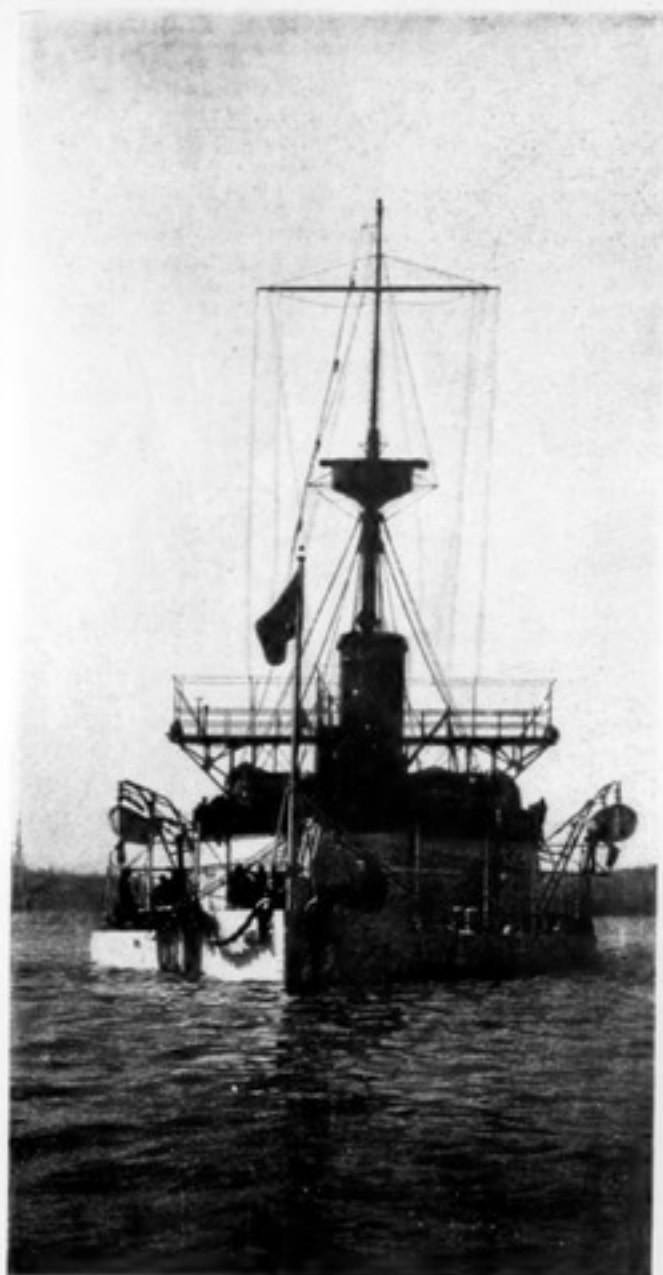


SCENES AT LEAGUE ISLAND NAVY YARD, PHILADELPHIA

- 1—MUSTERING THE CREW OF THE MONITOR "MIANTONOMOH"
- 2—PROVISIONING THE "MIANTONOMOH"
- 3—CAPTAIN CASEY, COMMANDANT OF THE YARD, AND COMMANDER HOUSTON, CAPTAIN OF THE YARD, LEAVING THE RAM "KATAHDIN"

- 4—VISITORS TO THE YARD ADMIRING THE "MINNEAPOLIS"
- 5—THE "MIANTONOMOH'S" NEW CREW GOING ABOARD
- 6—PLACING THE "MIANTONOMOH" IN COMMISSION; AS SOON AS THE ORDER WAS READ THE FLAG WAS RAISED AND SALUTED

From photographs by our Special Artist



THE DOUBLE-TURRET MONITOR "TERROR" AND HER CREW

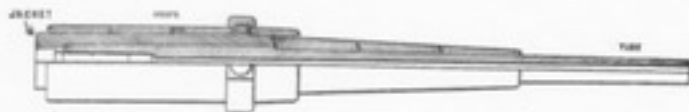
Photographed expressly for COLLIER'S WEEKLY by Bertr & Polla, New York

(See page 11)

THE NAVAL GUN FOUNDRY



THE eye of the casual observer, one of the huge rifles of a modern battleship appears the embodiment of tremendous power, but of little else. It is force incarnate, but blind, unreasoning force. Nothing about it suggests, what is nevertheless true, that in its design is involved the most advanced mathematical calculation, and in its construction a degree of precision rivaling that of the works of the finest watch. Its outward shape is not the result of caprice or of a seeking for symmetry, but is determined by the variation to be anticipated in the strain upon its walls as the pressure of the powder gases in the bore, suddenly developed upon the ignition of the charge, jumps first to a tremendous maximum and then rapidly declines, as its heavy projectile is swept before the whirlwind of the gases toward the muzzle of the gun. Nor is the gun by any means the solid, stolid mass that it appears. It has all the life and elasticity of an enormous spring, expanding quickly under the shock of explosion and as quickly contracting into shape. It is a "built-up" gun—built up of layer after layer of finely tempered steel, each layer shrunk upon the one within it and clamping it with a tension which must be determined to a pound before the manufacture of the gun begins. The details of this construction are shown upon the sketch appended.



The necessity for this seemingly complicated construction is not difficult to understand. If the gun were cast or forged in a single piece, the fibers of the metal on the inside would feel first the shock of explosion, when the gun was fired; and would be instantly expanded and thus strained before their expansion could transmit the pressure to the fibers nearer the surface. Thus it would happen that the successive layers of metal, into which we may imagine the walls of the gun to be divided, would be strained in turn and possibly ruptured in turn, instead of all contributing their share at the same instant to meet and resist the strain. It is found, in fact, that exactly this action does take place where a gun is manufactured in a single piece. The modern gunmaker meets this difficulty by building up the gun as shown, the inside of each cylinder being slightly smaller than the outside of the one it is to inclose, so that the outer one must be expanded by heat before it can be put in place. The cylinders are thus shrunk one upon the other, as a tire is shrunk upon a wagon wheel. The effect of this is to place the inner cylinder under a slight compression, while the outer one is on a stretch. Now, when the pressure comes, the inside layers, starting with a slight compression, can stretch a little without strain, while the outer ones, being on a tension, feel the slightest expansion from within and tend to resist it, thus taking their share of the strain at the very instant of its development.

The general principle here is clear enough. What is not so clear is that the amount of shrinkage to be given each part of the gun must not only be determined with the utmost delicacy of mathematical calculation, but must take account not alone of the strain involved, but of every characteristic of the steel to be used; of its chemical composition, its "tensile strength," its "elastic limit," its "elongation," and some half dozen other qualities whose names would have no possible meaning for any other than technical readers. Since all these characteristics of the metal to be used enter into the preliminary calculations for the gun, it will be understood how closely the steel makers must adhere to the specifications furnished them, prescribing these characteristics. Under a rigid system of government inspection, they do adhere closely to these specifications; and as a result there has been developed in this country, along with the development of our national defenses, an industry which, but for the stimulus of government contracts, would doubtless still be as little known in the United States as it was fifteen years ago, when the reconstruction of our navy began; for the steel demanded for guns, like that demanded for armor, is of a quality so much superior to any steel made in this country before that time that it is practically another metal.

This steel is manufactured at the great establishments of Bethlehem, Midvale and Pittsburgh, and shipped to the ordnance factory at Washington, where all the guns for the navy are constructed. This factory is one of the largest and most perfectly equipped establishments in the world, rivaling, if not excelling, the great foreign gunshops of Armstrong, Krupp and Canet. It occupies the site of the old Washington Navy Yard, most of the buildings of which have been utilized for the manufacture of ordnance material other than guns—projectiles, mounts, and the like—without which the guns themselves would be of little use.

The factory employs, in ordinary times, rather more than a thousand men; and at present, under the "hurry" orders of the navy department, this force is more than doubled; yet as one walks about the vast but crowded spaces of the shops, the men seem few and very small; nor have they the appearance of bear-

ing any important relation to the tremendous energies at work about them. It is the great masses of metal and the great engines engaged in handling and shaping them that fill the eye and impress the mind. If a sixty-ton gun is to be moved, no doubt some human agency directs the work, but all that is apparent is that a great crane up overhead becomes somehow endowed with life, and, moving over to the gun, picks it up and deposits it gently where it is wanted. And so, for every operation to be performed, there is an agency, silent and seemingly automatic, but always with power impressively adequate to the work required.

The forgings for the guns are received, as has been said, in the form of cylinders, roughly approximating to the shape and dimensions of the finished parts. Each cylinder goes first of all either to a lathe or to a boring machine, according as it is to be finished first on its outside or its inside surface.

The basis of the whole construction—the core about which the gun is built up—is the tube; a long slender cylinder with thick, tough walls, the inside of which forms the bore of the gun. Over this, and strengthening it at the rear and for some distance forward—over the whole length where the maximum pressure is to be felt in firing—comes the "jacket," the hardest forging in the gun; and over tube and jacket both go the "hoops."

The first step is to turn down the outside of the tube and the inside of the jacket to the proper dimensions, which, as already explained, are calculated with great exactness, the inner diameter of the jacket being less than the outer diameter of the tube over which it is to be placed. The turning is done in large lathes, the depth of whose cutting can be regulated to the thousandth part of an inch. The proper dimensions having been reached and verified by careful and repeated measurement, the tube is placed vertically, with its muzzle down, in the "shrinking-pit" ready to receive the jacket. The latter is now placed in a furnace, where it stands upright, surrounded by hot air, but not by flame. Here its temperature is raised slowly and evenly to about six hundred degrees Fahrenheit, which is found to be the proper temperature to give the necessary expansion for slipping it on over the tube. It is then lifted by an overhead traveling crane and moved to a point where it hangs directly above the shrinking-pit. Its inside diameter is then carefully measured to make sure that it is expanded sufficiently to go on to the tube; were it to "stick" when part way on it could not possibly be removed without ruining either the tube or the jacket or both.

The jacket, having been slipped into its place upon the tube, is allowed to cool and shrink there, after which both parts, forming now a single piece, are placed in a lathe and turned down to the proper size to receive the hoops, which are shrunk on one after the other, exactly as above described, save that the gun is placed horizontally instead of vertically to receive them. The gun is next bored out inside to its final diameter and shape, and then the bore must be rifled. There is no part of the whole construction where greater exactness of workmanship is required than here, nor any where greater ingenuity has been shown in devising methods for the work. It is difficult enough to work to the thousandth part of an inch on the outside of the gun; it is far more difficult to do such work on the inside of a tube forty feet long and only thirteen inches in diameter; for here neither the hand nor the eye can count for much. The problem is to cut fifty-two spiral grooves upon the surface of the bore, each to an exact depth of five one-hundredths of an inch, and all exactly parallel to each other. Moreover, the spiral is not to be uniform throughout its length, but must begin with a very gentle twist gradually increasing toward the muzzle. The object of these grooves is, of course, to give the long projectile a rotation about its axis, which shall keep it steady and true in flight. If this rotation were given at once as the projectile started from its seat, the strain upon the gun would be enormous; but by the arrangement adopted the projectile starts forward with only a very gentle twist, and spins up gradually until, as it leaves the muzzle, it is spinning at the rate of nearly one hundred turns a second.

There is still much work to be done upon the gun to fit it for service, but this cannot be here described in detail. The "breech block" must be fitted to close the gun at the rear after the gun is loaded, and this breech block must be provided with a "gas check," to prevent absolutely the escape of gas when the gun is fired. This is no simple matter, as the gases have a pressure of fifteen tons to the square inch and a temperature measured in thousands of degrees. The gas check is a plastic pad made of asbestos and tallow and covered with canvas, fitted between two steel disks in such a way that, as the pressure of the gases is developed, this pad is squeezed out all around against the surface of the bore, making a joint which only becomes tighter as the pressure becomes greater.

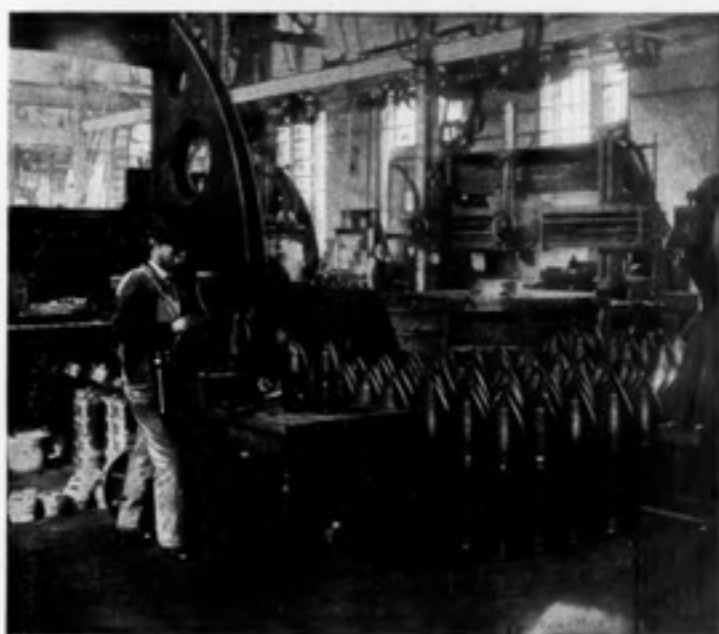
Not less important than the gun itself is the mechanism upon which it is mounted in the turret of the ship. These mounts are made in a shop adjoining that for the guns. It will be easily understood that the mechanism which permits one man to point and fire a sixty-ton gun, which receives and absorbs the tremendous force of recoil of such a gun without shock or strain upon the turret, and in three seconds automatically returns the gun to position for loading and firing again—it will be easily understood that this mechanism also must have interesting points.



SIX-POUNDER MAXIM GUN—SEMI-AUTOMATIC



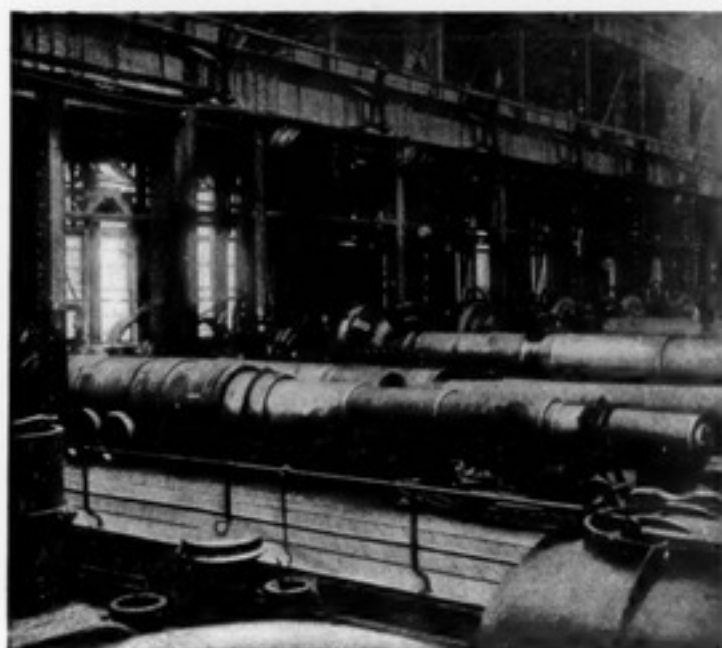
IN THE LABORATORY—ANALYZING GUN-STEEL



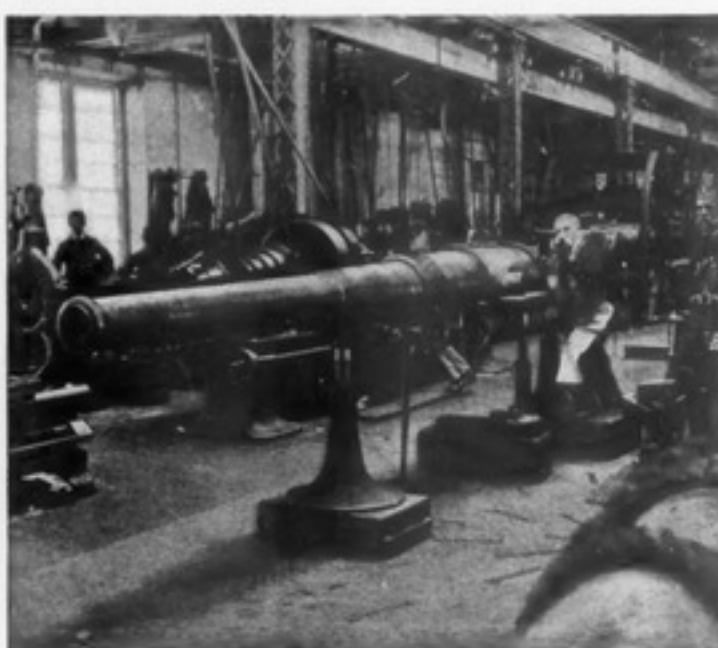
FILING THE POINT OF AN ARMOR-PIERCING PROJECTILE



PATTERN OF OSCILLATING SLIDE FOR BATTLESHIP TURRET

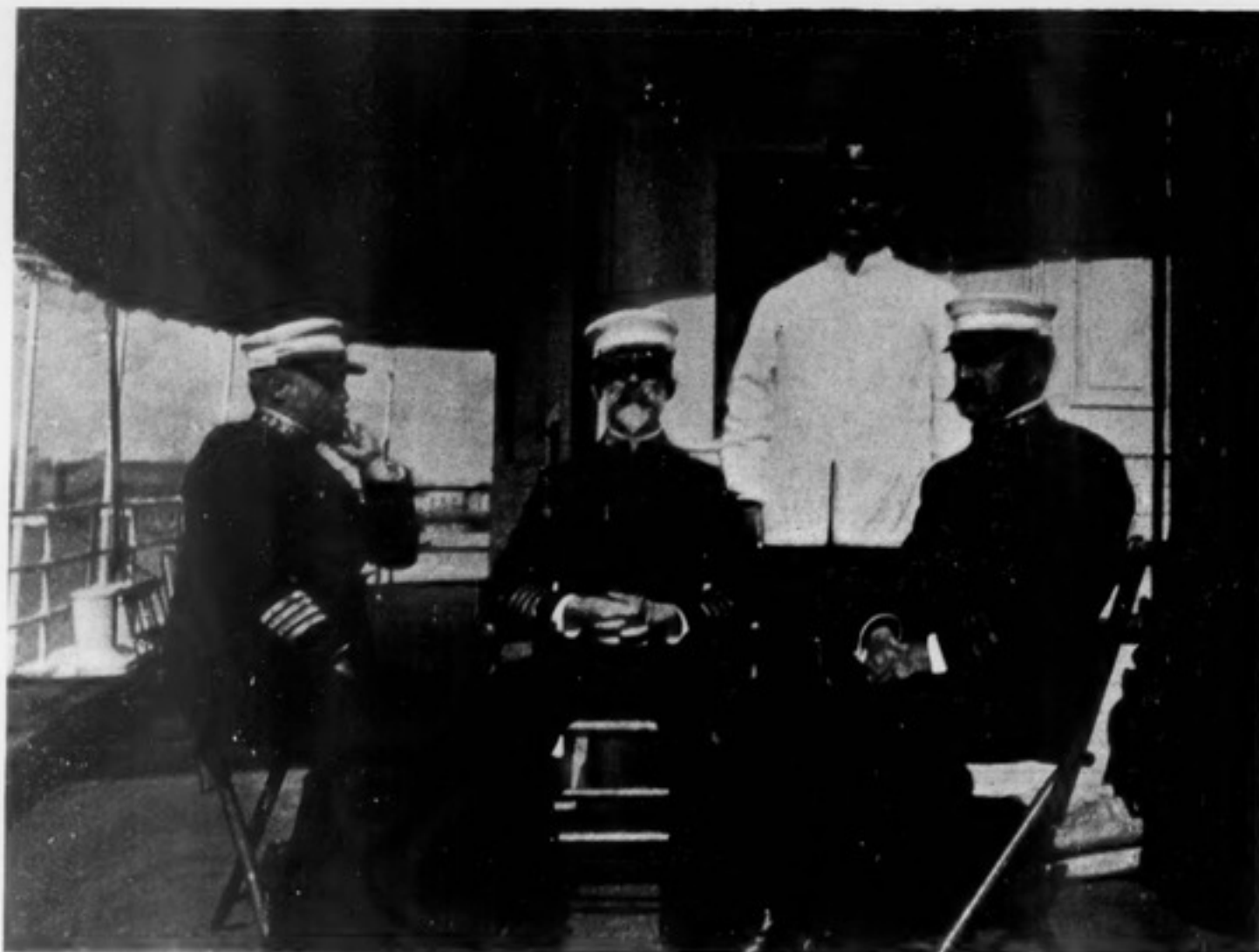


THIRTEEN-INCH GUNS ON LATHES

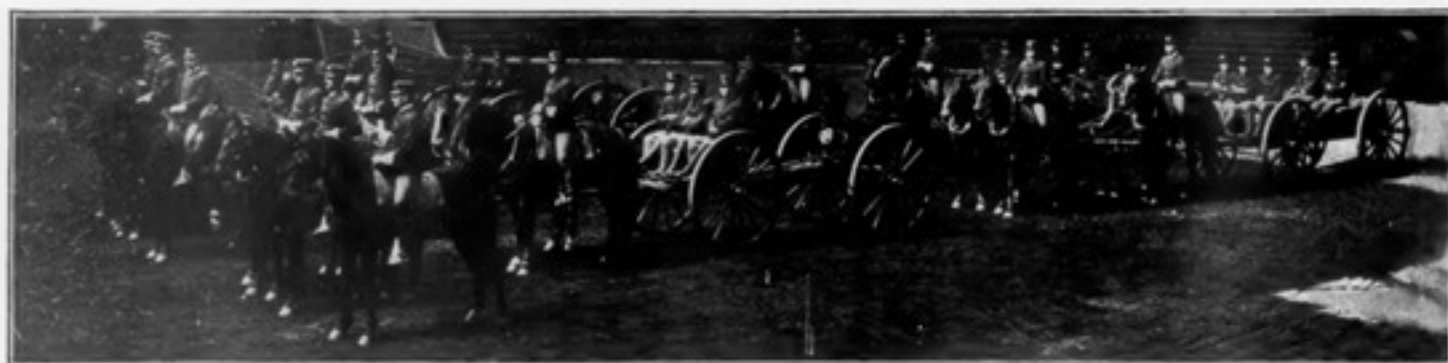


SETTING THE SIGHT FOR A FIVE-INCH GUN

SCENES IN GUN FOUNDRY AT THE WASHINGTON NAVY YARD



CAPTAIN CHADWICK CAPTAIN SAMPSON LIEUT.-COM. MARIX LIEUT.-COM. POTTER
THE "MAINE" BOARD OF INQUIRY—PHOTOGRAPHED AT HAVANA BY OUR SPECIAL ARTIST



MILITARY SCENES AT THE ATHLETIC TOURNAMENT, NEW YORK, MARCH 14-19

1—POSITION OF REGULAR ARMY TROOPERS IN REPELLING AN ATTACK
2—LIEUTENANT W. C. SHORT, SIXTH U. S. CAVALRY

3—A SECTION—TWO GUNS AND THEIR CAISSONS—OF LIGHT BATTERY D,
FIFTH U. S. ARTILLERY

From photographs by our Special Artist



THE great tragedy in Havana Harbor is destined to have an important influence upon naval warfare. To experts, it has been a lesson learned through fire and blood, and demonstrates, once more, the awful destructiveness of the torpedo. The annihilation of a five-million-dollar battleship, and the hurling into eternity of two hundred and fifty-three brave men, appalling as it has been to the civilized world, was, nevertheless, a complete vindication of the theories maintained by the disciples of high explosives.

Military and naval men will now devote their undivided attention to the development of the torpedo for offensive and defensive operations—and I am safe in predicting that in this our country will lead, as it has in perfecting the ironclad, the rifled-cannon and the swift cruiser. Already the ordnance shops of the Driggs-Seabury Gun and Ammunition Company are working night and day upon a new high explosive gun that bids fair to revolutionize modern warfare. The fact that Rear-admiral J. A. Howell, U.S.N., to whom the world is indebted for the most effective automobile torpedo, is the father of the new weapon, will do much to inspire confidence in the possibilities of this, his latest invention.

For many years experts have been striving to produce an instrument that could throw a great mass of high explosive with safety and accuracy. Owing to the destructive effect of dynamite, it has been used, instead of gunpowder, as an explosive in ordinary shells. The shock of discharge, however, has more than once caused a premature detonation which completely destroyed the gun. Seven pounds of high explosive is the maximum that it has been considered safe to use as a charge for a shell fired from a powder gun; and this diminution of explosive naturally lessened the destructive energy of the projectile.

The next step was to throw a large quantity of dynamite, incased in a thin steel envelope, trusting to the effect produced by the detonation of the high explosive itself, rather than to the broken pieces of a heavy projectile. To accomplish this, however, it was necessary to construct a special gun, in which the shock of discharge could be minimized. This result was attained only by sacrificing initial velocity, range, and accuracy—as in the pneumatic or dynamite gun. For a time it looked as though the problem had been solved, so much so that the United States Government built the *Vesuvius*, a special type known as a dynamite cruiser. She was fitted with three 15-inch pneumatic guns, each of which could throw five hundred pounds of wet gun-cotton a distance of twenty-five hundred yards. The experiment was costly—and one which results have never justified.

The *Vesuvius* was not exactly a failure, yet she was, by no means, a success. Experts differ as to her efficiency, and, it is fair to presume, that they always will—until a better type is evolved. Many arguments against her, however, stand the test of intelligent criticism, and not the least important among these was the length of her guns. Owing to the pressure of the compressed air being only seven hundred and fifty pounds per square inch, it had to act for a long time upon the base of the projectile in order to impart even a low velocity. This necessitated a fifty-foot tube—too long, of course, for vessels of war, where space is of such intrinsic value. For practical purposes, it was necessary to build these guns as a part of the vessel itself, and in this way three of them were placed on board the *Vesuvius*. They had a fixed elevation at an angle of thirty degrees, and, not admitting of any lateral motion, to sight them upon an object, the whole

ship had to be swung from side to side. The delicate and intricate machinery for compressing the air, the difficulty of regulating the pressure, and the impossibility of obtaining a fuse that was safe and, at the same time, would be set in action when desired, were also insuperable objections. The projectile, which was in reality an aerial torpedo, also had its defects. The gun, of course, could not be rifled, and an imperfect rotation was, therefore, imparted to the torpedo by means of vanes attached to a tailpiece. Owing to the resistance of the atmosphere against these vanes, the tailpiece acted as a drag and thus reduced the range. Despite a series of careful experiments, which pneumatic enthusiasts claim demonstrated the efficiency of the system, the idea of constructing other dynamite cruisers was abandoned by our government, and the *Vesuvius* has recently been acting as a dispatch vessel for the fleet in Southern waters.

The objections which militated against the guns of the *Vesuvius* type brought forth another weapon for throwing high explosives—the Sims-Dudley dynamite gun. This was, doubtless, one step forward, though the only tangible improvement was a simplification of the means of compressing the air—inaccuracy and want of range remaining the same. The Sims-Dudley gun consists of three horizontal tubes, the central and right-hand ones being fitted with breech mechanisms. The main, or central tube, is larger than the others, and contains the projectile. The right-hand tube is closed, and at the forward end communicates, by another passing under the central one, with the left-hand tube. This, in turn, communicates with the breech end of the main tube.

The projectile consists of a cylindrical body, with a conical head, and a long tailpiece at the rear end fitted with vanes, in order that it may be given a rotary motion while passing through the air. To fire the gun, the projectile is inserted in the main tube and the breech closed. A small blank cartridge is then placed in the right-hand tube—and the secondary breech closed. When the cartridge is fired, the expansion of the powder gases compresses the air imprisoned in the tubes, forming a cushion behind the projectile—thus avoiding the shock of discharge. The elimination of the expensive machinery for compressing the air was, undoubtedly, a move in the right direction, and for this the inventor deserves great credit. It is open to criticism, however, for the range, even with the largest caliber, is limited to sixteen hundred yards, and the rotary motion imparted to the projectile by the resisting vanes on the tailpiece is too slow to give any degree of accuracy. If fired rapidly, the interior of the tube becomes heated by the gases, and a premature detonation is liable to occur—in fact, a 4-inch gun of this type was recently destroyed and the muzzle of another blown away. Several of these guns of 2.5-inch caliber have been used by the insurgents in Cuba, and though their projectiles have been very destructive against the Spanish fortified towns, their effective range was only five hundred yards.

Experts then came to the conclusion that the only solution to the problem lay in a projectile which might receive impulse from forces residing within itself—thus performing the twofold function of piece and projectile. These peculiarities, as can be readily seen, fulfill every condition for throwing, with perfect safety, masses of high explosive, but the advance in one direction was outweighed by several insuperable objections in others. This carried experimentists back to the rocket, which was used for signaling, display, and even as a weapon of war, before the discovery of gunpowder. And upon these lines Rear-admiral Howell had been investigating until he succeeded in producing a gun that will give to the rocket the accuracy of a rifled

projectile, and fall but little short of it in range. Before describing the new invention it might be interesting to trace briefly the evolution of the rocket—showing why it has never been in general use for war purposes, and later how American genius has made it the most formidable weapon for both attack and defense.

As early as the ninth century rockets were used in China and India, but owing to the numerous conditions to be fulfilled to obtain accuracy of flight, their use for military purposes was restricted, and their sphere of operations limited to incendiary purposes. As the initial velocity is 0, and this increases with the density of the gas generated, the rocket, after the gas has ceased to escape, loses its distinctive character, and becomes, so far as its motion is concerned, an ordinary projectile. As the propelling force changes its direction with the axis along which it moves, it naturally follows that, without some means of giving stability to this axis, the path described will be very irregular—in fact, the deflection has been so great that rockets have been known to return with great velocity at the very troops who fired them. An example of this erratic motion may be seen in a class of pyrotechnics known as "serpents," which are really rockets without guide sticks. Another cause of inaccuracy is the constant change of the center of gravity, which takes place as the propelling charge is burned. Many attempts have been made to impart a rotary motion to the rocket, so that the gyroscopic principle that keeps the rifle ball straight in its path might be utilized. This was first tried in the Hale war rocket, where rotation was produced around the longer axis by the escape of gas through five vents situated obliquely to it—the resultant of the tangential forces acting around the posterior extremity of the axis of rotation. Another experiment consisted in attaching vanes, which, owing to the resistance of the atmosphere, would keep the rocket straight during flight as the feathers do an arrow.

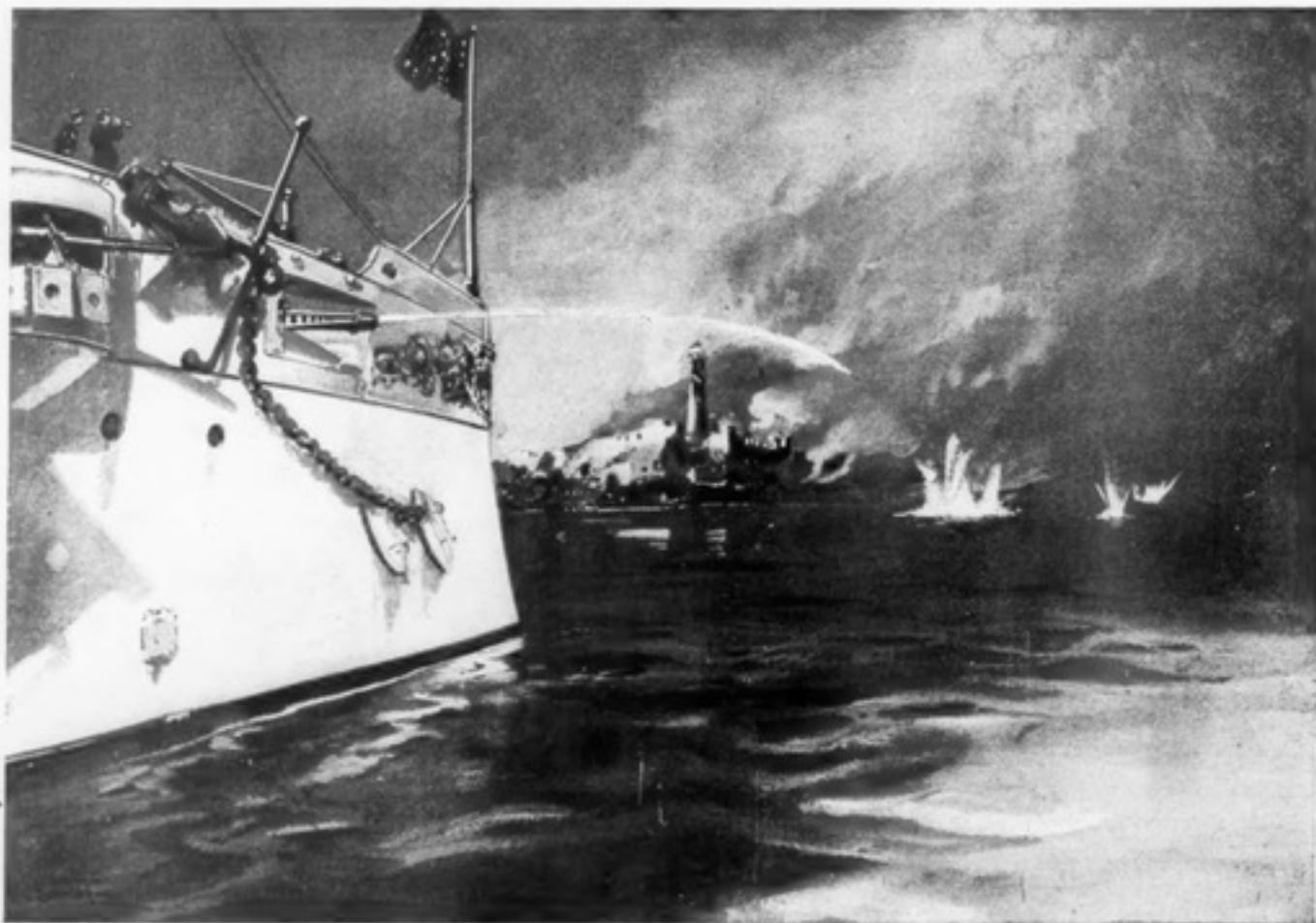
In 1804 Sir William Congreve took up the study of the rocket and attempted to improve it. He substituted an iron case for the paper one, thus making it possible to use a more powerful composition. He also employed a shorter and lighter stick and removed one source of inaccuracy of flight by attaching it to the center of the base instead of the sides. Though all these improvements tended to perfect the rocket to such an extent that it was used at the siege of Boulogne and the battle of Leipsic, it was never possible to use an explosive charge of more than twenty-five pounds, and the range was never greater than twenty-three hundred yards.

Rear-Admiral Howell argued, however, that accuracy and range would be attained only when the rocket could be given the same rotary motion that a powder gun imparts to a steel projectile. To produce this in an ordinary gun requires a pressure of fifteen or twenty tons per square inch—a force so great

that it would detonate any mass of high explosive at the instant of discharge. The inventor, therefore, conceived the novel idea of revolving both the gun and its charge. The projectile, consisting, in the 10-inch caliber, of one hundred pounds of gun-cotton, is incased in a thin metal envelope, the rear end of which contains rocket composition, and the head a percussion fuse which is set in action by the force of impact. This is placed in the gun, and when, by a mechanical contrivance, it has been spun up to twenty-five hundred revolutions per minute, a friction cap ignites the rocket composition, and the banked up pressure at the base starts the rocket. This, then, begins its flight with a rotary motion corresponding to that of the gun. The fact that this motion is due to neither the resistance of the atmosphere against vanes nor to the escape of a part of the propelling gas from a number of vents, gives it great *range, velocity*, and, above all, perfect *accuracy*—while the absence of any initial shock of discharge renders it absolutely safe.

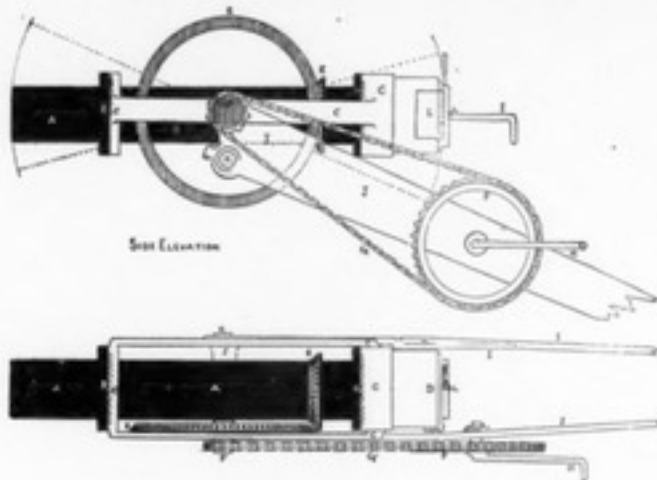
The heaviest war rocket fired from the new Howell gun will weigh three hundred pounds, the range will be about three thousand yards, and its accuracy almost equal to that of a rifle projectile. The piece, though it cannot be called a high-angle-fire gun, nor one of pointblank range, is between the mortar and the rifle. The new gun can be used in both offensive and defensive operations, ashore or afloat—in fact, Mr. Sonntag, in his double-page illustration, represents a battleship attacked by several of these guns and the effect of a detonation against her armored sides.

The enemy is supposed to have been one of a large fleet that has engaged the Sandy Hook batteries, and, either through the smoke and confusion of battle or some other chance of war, has succeeded in passing the fort, clearing the channel of torpedoes by countermining, and is speeding for the Narrows, from which point she expects to make of New York a mass of smoking ruins. She has not reckoned well, however, for, owing to great draught of water, the battleship is compelled to follow the tortuous main ship channel, which brings her within range of the new weapons of destruction mounted on the point of Coney Island. The decks of the enemy are cleared to fight the forts that mark the harbor entrance, for the insignificant little pieces on the white sands of New York's pleasure ground have not engaged the serious attention of the commander. The great guns of his main battery, though pointed in that direction, have not deemed them worthy of a single broadside. This he reserves for the more difficult task of silencing the forts of the Narrows. A report, little louder than that of a toy pistol, however, at last attracts his attention—and, before he has time to reply with even one of his rapid-fire guns, a number of steel cylinders are hissing and sputtering through the smoky atmosphere. With accelerating velocity, they rise as high as the foremast-head, then turn their noses downward, and, with unerring aim, one of them crashes into his



FLAG-SHIP "NEW YORK" COUNTER-MINING A HOSTILE HARBOR BY MEANS OF THE NEW ROCKET-TORPEDO

starboard side forward, tearing away the armored plates and leaving a hole through which rush the waters of the bay. Another falls a little astern, too far away to do its work of destruction, though the concussion shakes the ponderous fighting machine from stem to stern, disables her steering gear, and puts her engines out of line. The guns from the forts at the Narrows now open fire at long range, and, after a few well-directed shots, a white flag is floating at the masthead—and New York is saved.



PLAN OF FIELD-PIECE

A Revolving barrel of gun.
B Bell-ows fixed to barrel.
C Frame of gun (stationary).
D Breech and breech mechanism.
E Bevel gear.
F Sprocket wheels.
G Chain.
H Actuating crank.
I Elevating and depressing arm.
J Frame of carriage and mounting.
K Axis.
L Pivoting pin.

The other illustration represents our flagship, the *New York*, with two of these guns, of the 10-inch type, mounted one on each bow. She is in the act of forcing an entrance into a hostile harbor planted with submarine torpedoes. Knowing the radius of sympathetic action, or, in plain language, that the concussion produced by any high explosive will detonate all others within a circle whose radius is fifty feet, the starboard rocket-gun is brought into action. Five hundred yards ahead there is a muffled explosion, followed by a rising column of water that sparkles in the tropic sunlight. This is immediately succeeded by other and greater explosions, and the flagship knows that she may proceed in safety followed by the other vessels of the fleet. The port gun also throws her torpedo-destroying projectile with a like result, until the entire channel is clear and the fleet is ready to engage the batteries of the inner harbor.

Following is a technical description of the new gun that may play such an important part in the warfare of the future: While the general system is the same for all services, the field type differs in details of construction and methods of rotating from the larger gun used for fortifications and service afloat. The field piece consists of a cylindrical tube forming the main body, which is separate from the part containing the breech. The gun is supported by steel framework, the rear end of which carries the breech portion, and the front forms the forward half of the muzzle ball-bearings, the other half consisting of a ring shrunk upon the tube near the muzzle. Since the bore is perfectly concentric with the breech cavity, the gun can be loaded without absolutely bringing the main tube to rest. In this type, the gun is rotated by means of gear and sprocket wheels—similar to those on the bicycle for multiplying speed and transmitting power. A small bevel gear which surrounds the gun engages a larger one mounted on the trunnions. This large wheel carries on its shaft a small sprocket one to which it is keyed. A sprocket chain leads from this to a large sprocket-wheel mounted on the trail. This latter wheel may be revolved either by hand or foot power, depending upon the size of the gun. The speed is so multiplied, through this system of sprocket-chain and gears, that a velocity of twelve hundred revolutions per minute is imparted to the gun.

Owing to there being practically no pressure in the tube, there is no recoil, and therefore the carriage remains in position. The elimination of the strain due to recoil permits of an extremely light carriage, the weight of the 3.5-inch field gun and carriage complete being under four hundred pounds. The breech mechanism is extremely simple, and of the interrupted screw type. A copper gas check is provided which takes the place of the brass cartridge case in rapid-fire guns, or the De Bange gas check in larger pieces, which prevents the escape of gas into the breech mechanism. The firing of the gun is accomplished as follows: The breech block is first opened, and the projectile inserted. It is then closed and the primer attached. The gun is then spun up, and when revolving rapidly enough, and pointed at the target, the lanyard is pulled, the primer fired, and the flame communicated to the rocket composition in the end of the projectile. A certain amount of the gas is allowed to escape around the rocket so that no more pressure will be banked up than is sufficient to give the projectile a good start. After leaving the muzzle, the burning of the rocket composition increases the density of the gas, thus imparting an accelerating velocity.

In the larger type used for fortifications and on board ship, the side frame which forms the trunnions of the breech is replaced by cylindrical casing which carries the trunnions at its forward end. From the trunnions, the construction is similar to that of the field-piece. The breech mechanism and method of loading are practically the same. The transmission of the power, however, and the multiplication of speed, are quite different. In this type, the power for rotating the gun is an electric motor attached to the top carriage of the mount. A gear in the armature of the motor engages a pinion upon a shaft passing through the trunnions, which are hollow. The shaft transmits the power to the gun, imparting a rotation of from twenty-five hundred to three thousand revolutions per minute, this speed being reached in a few seconds from a state of rest.

The top carriage is fitted with the usual trunnion bearings and cap squares, and is mounted on the pedestal so as to admit of the gun being trained in any direction. On board ship, the pedestal is bolted to the deck, and on land it is secured to a foundation of masonry or concrete. The projectile of the new gun, of the 10-inch caliber, will weigh about three hundred pounds—one hundred of which will be the high explosive. This will be detonated by a percussion fuse, which will act upon impact with a hard substance. For countermining, a potassium fuse will be employed, as this substance is ignited by water.

OUR COAST DEFENSE VESSELS

IT IS the misfortune of the inconspicuous to be overlooked, especially in times of great excitement; so in the many articles recently published on our navy there has been but little mention of vessels of the monitor type. Besides not being showy, the monitors are not speedy, so they do not appeal to the imagination.

Yet the monitor is the only type of war-vessel that has never been put out of action by shot or shell. Its guns are within heavily armored turrets, its deck is protected, as are its sides, which are almost invisible to an observer a mile distant; it is therefore a difficult mark for an enemy's gunners. At the same time it is a solid gun-platform, owing to its great breadth, than any big cruiser afloat.

The United States has in commission six fine vessels of this type. The *Terror* (see illustrations on page 5) is similar in appearance, displacement and armament to the *Amphitrite*, *Miantonomoh*, and *Monadnock*; the latter has almost twice the engine-power of any of her sister ships. Although monitors are said not to be sea-going ships, the *Monadnock* once made the trip from New York to San Francisco, and two of the others have taken part in fleet evolutions. Each of the four vessels named has two turrets and four 10-inch breech-loading rifled guns, carrying 500-pound armor-piercing projectiles. Although not speedy, these vessels can make their way to any harbor of the coast that may need additional means of defense. The displacement of each is nearly four thousand tons—but little less than that of the *San Francisco* or *Newark* and more than seven hundred tons greater than the fine *Cincinnati* or *Raleigh*.

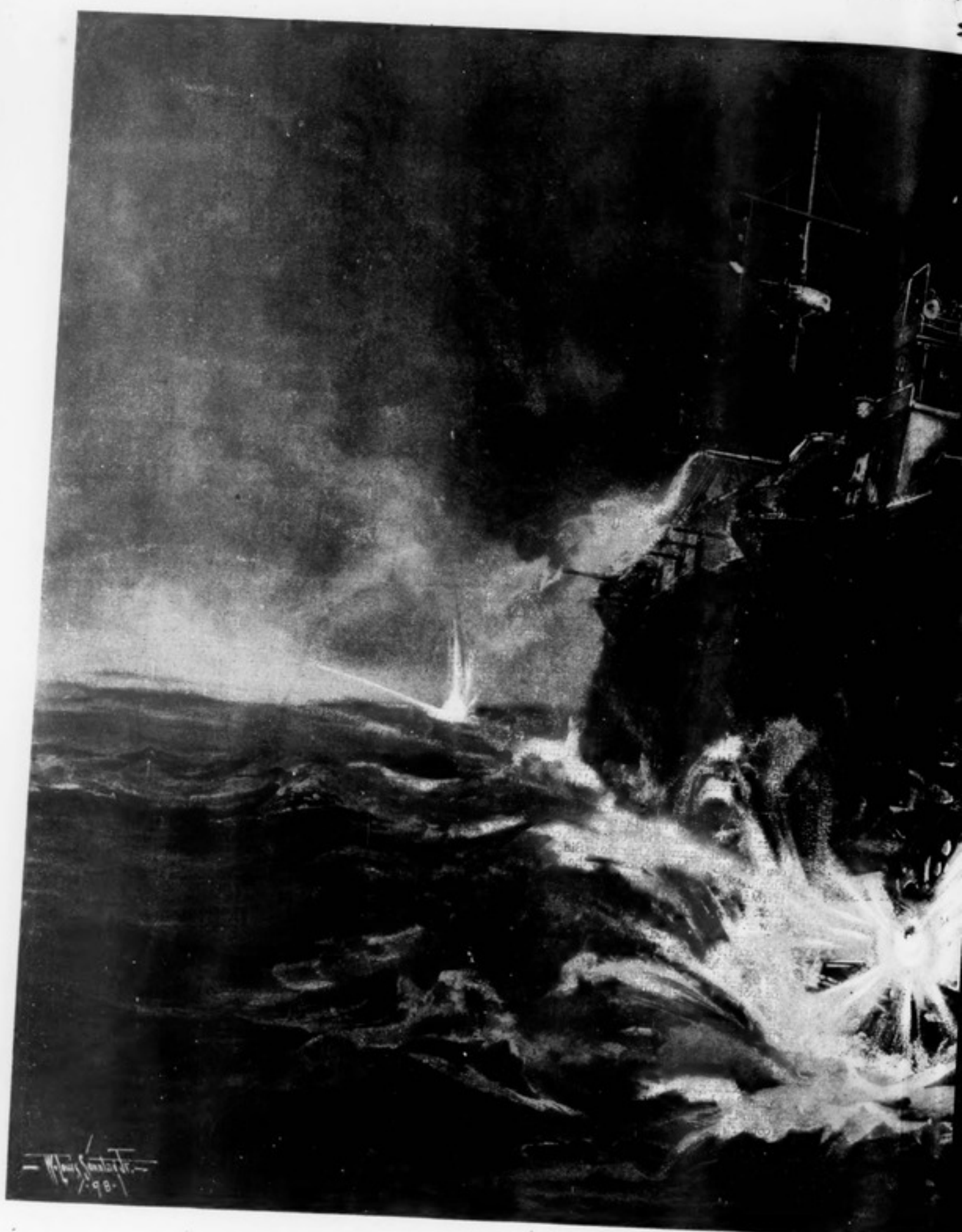
Slightly larger and with far more powerful engines is the monitor *Monterey*, which also has more freeboard, or higher sides, and two of her rifled guns are of 12-inch caliber. A giant among monitors is the *Puritan*, of more than six thousand tons, and grading, officially, as a "first rate." Her main battery is of four 12-inch breech-loading rifles, the projectiles for which weigh half a ton each. As a fighting machine the *Puritan* has no naval superior except a first-class battleship.

Besides the monitors already mentioned, we have thirteen of the original type—each with a single heavily armored turret containing two 15-inch smooth-bore guns. It has been the fashion to call smooth-bores obsolete, but there is not in the world an unarmored cruiser that could not be destroyed by three well-aimed shots from one of the old monitors' smooth-bores; as to that, shells from a 15-inch smooth-bore would do great damage to any battleship if placed above the armor-belt. The old monitors may be depended upon to keep an enemy's cruisers from entering harbors of the second class, even should the smooth-bore guns not be replaced by 6-inch rifles, as has been suggested.

MIMIC WAR BY REAL SOLDIERS

NEW YORK has been indulging in a week-long tournament in which athletic and bicycle events consumed most time but military exercises gave most general satisfaction. Among the participants were detachments and organizations from all branches (including the Naval Reserves) of the militia service of New York and neighboring States. The regular army also was represented—not largely but so admirably that every holder thought the country entirely safe when men so alert, skillful, and daring were among its defenders. There was some wonderful make-believe war; less exciting, yet extremely interesting, were the doings of troopers and horses, of which our special artist took photographs.—(See illustrations on page 8.)

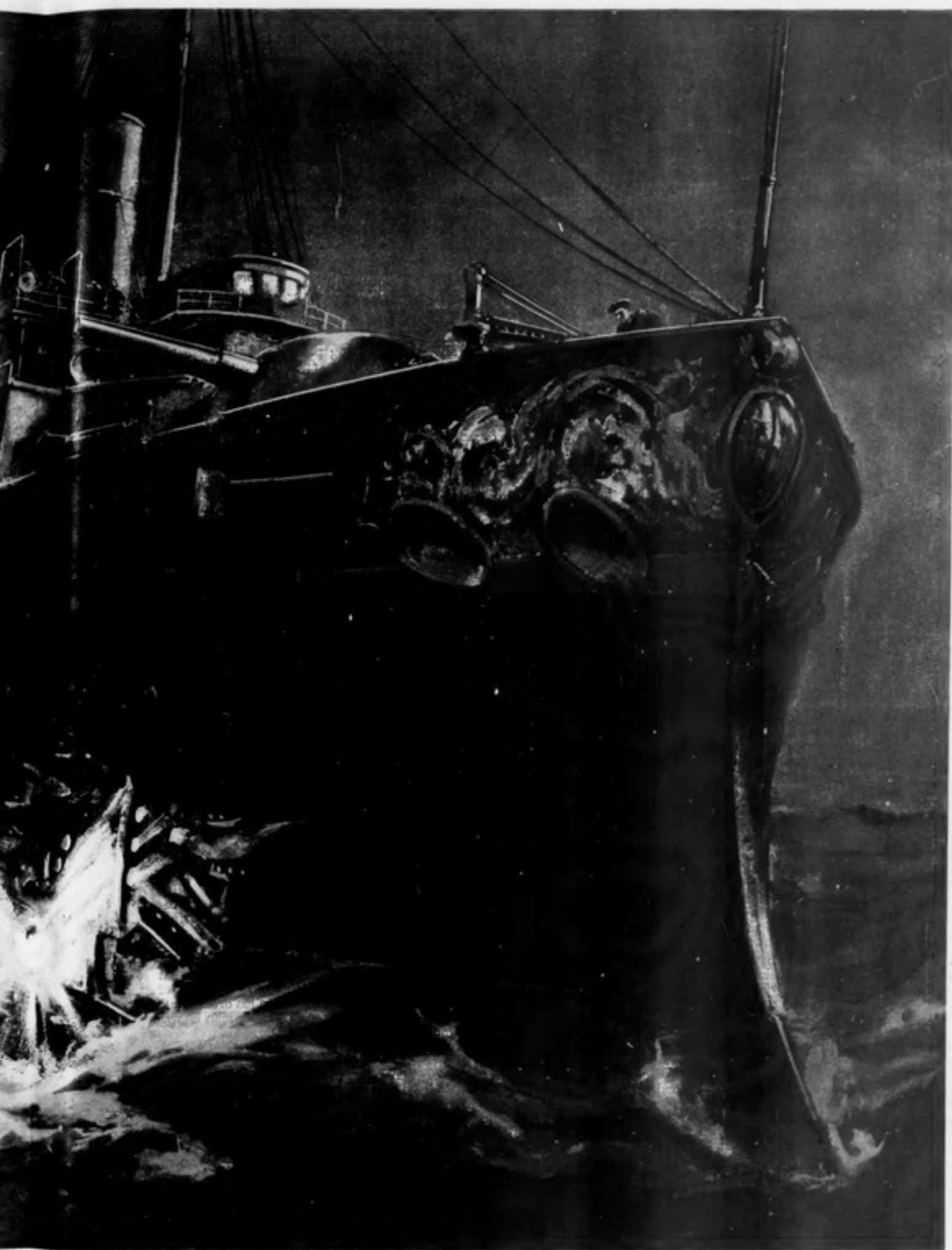
COLLIER



—Wm. Sonntag Jr.—

EFFECT OF PRO

—WITH ACCELERATING VELOCITY, THE
CRASHES INTO HIS STARBOARD
THE BAY—(See Page 9)



OF PROJECTILES FROM THE HOWELL ROCKET-TORPEDO GUN

TING VELOCITY, THEY RISE AS HIGH AS THE FOREMAST-HEAD, THEN TURN THEIR NOSES DOWNWARD, AND, WITH UNERRING AIM, ONE OF THEM
INTO HIS STARBOARD SIDE FORWARD, TEARING AWAY THE ARMORED PLATES AND LEAVING A HOLE THROUGH WHICH RUSH THE WATERS OF
(See Page 9)



OUR NOTE-BOOK

BY EDGAR SALTUS



PAIN'S rule on this hemisphere being editorially threatened, it becomes interesting to inquire in what it consists. Ninety years ago, barring Brazil and the Guianas, the rule of Spain extended all over South America, it extended all over Central America, it extended all over Mexico, and save for an island here and there, it extended all over the West Indies. In addition, Spain possessed California, Nevada, Utah, Colorado, Texas, Arizona and Florida. It was a good deal.

Two years later there were revolutions everywhere. Peru, Chili, Venezuela, Colombia, Mexico and Ecuador were all in arms. Then from Buenos Ayres to the City of Mexico there was war. The battlefield was the largest in history. For ten years they kept it up. At the expiration of that period the emancipation of Spanish America was practically complete. At Callao a little later the last Spanish flag was furled. Of the entire struggle history has preserved but the facts. They suffice. The point is, that from all that was, but Cuba and Porto Rico remain. When they go, Spain's rule can't be said to end. It died and was buried long since. *Vae victis.*

THE FORTUNATE ISLES

Spain, in addition to Cuba and Porto Rico, possesses other islands. There are the Philippines. With editorial sanction we might take them and give them to the Japs. There are the Balearic Islands, which have been Spain's since Spain began. We might take them and give them to England. Then there are the Canaries. We might take them also and keep them for ourselves. Kennst du das land wo die Citronen blumen? There it is. From there came the golden apple which originated the war of the world. It grew in a garden green as an emerald, where the daughters of Atlas and Hesperus dwelled. Iambulus says that there dwelled there also men with elastic bones, bifurcated tongues, who never married, whose life was an uninterrupted delight, and who when overtaken by age lay in a perfumed grass which produced a voluptuous death. That was a long while ago. Nothing of the kind is encounterable there now. Anteriorly, according to Evhemerus, there was there a column, about which, in archaic characters, ran a history of ancient kings, who, to the astonishment of tourists, were found to be none other than the gods whom the world then adored, and who in earlier days had proclaimed themselves divinities, the better to rule the hearts and minds of man. Evhemerus was a much later comer. In what fashion he learned what he recited, for that matter what texts and even what pretexts Iambulus had for stating what he did, is not recorded in mythology. But the Canaries are. They are not merely in mythology, they are in mythography.

THE FRUIT OF THE HESPERIDES

The Canaries are the Fortunate Isles. The girls who dwelled in the garden of emerald green were called the Hesperides. According to Hesiod, Apollodorus and other ancient, yet not standard, authorities, their principal diversion consisted in eating oranges under the chaperonage of a dragon. Hercules, happening that way, killed the duenna and opened the land to commerce. Thereafter the oranges were used for export purposes. They had a peculiar quality. They acted like love philters. Cf. Theocritus, Vergil. Even their appearance had a magic effect. Atalantis saw one. Previously an indifferent young person, instantly her heart began to beat. Hesperidum miratum mala puellam. Hence the dragon. A bushel basket of this fruit constituted Juno's dower. As already recited, because of one of them the topless towers of Ilium burned. They are still grown in the Canaries, but they have lost their savor. No hay pajaros en los nidos de antaño. By way of compensation the grape there used to produce a wine that had almost the same effect. Since 1853, when the phylloxera appeared, save in imitation or in choice cellars, it has been hard to get. The land, however, is still green. In many places it produces two crops a year. Concerning the name, Pliny says: "Canaria, so called from the dogs of great size." It may be that soon there will be bigger ones yet. With editorial sanction presently there may bark at those isles the dogs of war.

THE OMENS OF WAR

The Sword of Fire, which recently gleamed high in the heavens above Fort Lee, would have been viewed with larger concern a few centuries ago. The chronicles of Cassien, Vincent de Beauvais and Raoul Glaber are filled with lurid pictures of those dark days. An atmospheric disturbance, anything unusual overhead—a comet, for instance—and the world went mad. A mere eclipse frightened a king to death. Toward the close of the ninth century Paris enjoyed a cyclone and the inhabitants

the spectacle of monsters armed with battle-axes dropping from the skies and devastating the city. They believed in them thoroughly. Coincidentally a wolf entered the Cathedral of Orleans, and, seizing the bell-rope in his mouth, sounded the Dies Irae. The exact date was known. It was to occur on the 25th of March A.D. 1000. When that day arrived the climax was awaited through the succeeding fractions of each hour. The expectation lasted four days and four nights. Then, so runs the chronicle, an immense dragon shot through the open skies. There was the sound of trumpets afar, yet still the earth continued to spin. Humanity endured unclaimed. But of all portents the most dramatic is that which preceded the entrance of Cyrus into Babylon. In the light of that legend there looms an immense hall, illuminated by the seven branches of countless candelabra and filled with revelers celebrating a monarch's feast. Beyond, through retreating columns, rise cyclopean towers whose summits are lost in the clouds that lightning rends. At the royal table sits Belsarazzur, laughing mightily at the enterprise of the Persian king. At his side are the sacred vases filled with wine. He raises one to his lips, and there on the frieze before him leaps out the flaming letters of his doom, while, to the shouts of heralds, Cyrus and his army beat down the city's gates.

THE PROFLIGACY OF THE PEERAGE

Lord Rosslyn, an engaging young peer who has figured in three courts—St. James's, Bankruptcy, and the Court Theatre—and whose debts amount to nearly a million, recently celebrated his fiftieth appearance on the stage in a fashion entirely genteel. At a Piccadilly hotel he gave a dinner to fifty people. The incident was chronicled as one of the social events of the week. The occasion was too good to be lost. A virtuous newspaper took him to task. Attention was called to the fact that here was a member of the nobility unable to pay what he owed and yet quite able to entertain. At the recital of it the editor's ink blushed. The usual homily on the profligacy of the peerage ensued. But Lord Rosslyn, with an ingenuousness which does him almost as much credit as he seems to have otherwise obtained, made public announcement that the dinner was a hotel-keeper's advertisement to which he had been engaged to act as host. How much he was paid he is not reported to have told. The industry may seem new, yet what is? On examination it appears to be but the development of a practice long in vogue on the Continent. In Paris, Berlin, Vienna, and other social centers there are firms organized for purposes not similar but cognate. The tariff of a house in Halle runs as follows:

Dancing men in evening dress	2 marks	50
" " " good talkers	2 "	80
" " " with monocle	3 "	10
Cotillon specialists	3 "	75
Old gentlemen with decorations	3 "	75
Retired majors for chaperons	3 "	75
Nobleman to take hostess in to supper	20 "	

From the foregoing it will be seen that in Germany, where life is simple, it is quite easy to give a ball. In London, where life is more complex, it is not guests that are in demand, it is hosts. Lord Rosslyn appears to fill the bill. May he entertain long and prosper.

THE LAST OF THE KINGS

Otho von Wittelsbach, King of Bavaria, is rumored to be dying. The loss will be nil. The chief interest connected with it concerns the realm itself and its possible absorption. It is believed that the monarchy will be effaced. As a matter of fact its days have gone, its utility has ceased. Apart from the picturesque incidents connected with Lola Montez, its history culminated in Ludwig. Whether or not the latter was insane has been, and will be, problematic. If he were it is regrettable that there are not more lunatics like him. He is the only one of modern times who had the power to transform his dreams into realities and turn fancies into facts. As a young man he was regarded as the handsomest prince in the world. He looked as though he had stepped from a fairy-tale. As he looked, he acted. He was poetic and debonair. He was in love with life and life with him. He charmed peasants and empresses. By his people he was adored. He represented romance incarnated and enthroned. Then, to borrow a verb from Petrarch, his heart became imparadised. The young person was his cousin. She was fair but not faithful. He turned his back on her and incidentally on the world. The episode sufficed to change Lohengrin into a fat misanthrope. There developed within him a horror of being seen. He reconstructed the Palace of the White Cat. At Munich a mechanical device enabled him to be served by invisible hands. When he drove it was at night. In the Bavarian Alps his sudden appearances and disappearances are legendary still. Prince Charming became a phantom king. Otho, his brother, is not a poet, he believes that he is swine and lives down to the idea. His loss will be nil. The memory of Ludwig will endure. It rests in the enchanted palaces which he built and in the harmonies which he encouraged Wagner to create. He was history's last real king. He did what pleased him. If you can't do that it is idle to reign. There is no reason why with Otho this monarchy should not end.

THE HACKWORK OF AN ARTIST

Zola's "Paris," received here a fortnight ago, is as long as "Lourdes," as prolix as "Rome," and as heavy as both. The one was an excellent example of journalism, the other might readily displace Baedeker, but the utility of this book is less clear. The meek priest who wandered through the pages of the first and second appears anew. It is with his experiences, with what he sees and with what Zola sees for him, that the story has to do. For reasons not entirely apparent there is a constant shifting of scenes, a continuous show in which are successively displayed the different strata of which Paris is composed. There are the very poor and the very rich. There is the world of politics, of finance, of journalism and of the stage, "La Curée," "L'Assommoir," "Nana" and "L'Argent" retold and brought up to date. It is a sublimation of the Rougon-Macquart series issued for the convenience of the reader in a single book. But, like all condensations, it is dull. It suggests a panorama. The pictures which follow one another are colorful and lifeless. The people are there, but you know they don't exist. You see the canvas, smell the paint, smell the showman too. It is not art, it is commerce. Zola's ability is incontestable. With it he has often surprised, yet with it he has rarely done worse. There are pages elaborately planned to horrify from which merely weariness exhales. The shudder does not come. The yawn does. There is in particular one episode which, intended to be tragic, becomes, in failing, puerile. The note is forced. So, too, is the book. To use an idiom of the land from which it comes, ce n'est pas vécu. It is the hackwork of a great artist—a certain quantity of words written every day between breakfast and luncheon and then ladled out to the world. The central idea which it conveys is that in Paris everything is rotten, yet that from it the regeneration of humanity shall come. The deduction is obvious, but the paradox is poor.

A POET'S CHEF D'ŒUVRE

Edmund Rostand's play, entitled "Cyrano de Bergerac," reached here coincidentally with Zola's "Paris." On the cover of each is the same rubric—Fiftieth Thousand. There their similarity ends. This is not the hackwork of a great artist. Its pages are gemmed. In the veins of the characters there is not a drop of ink. They not only live and move and have their being, they delight and charm. Their creator was not thinking of commerce. If an opinion be worth anything, he seems to have been sunstruck by Victor Hugo, or if not, then by the glare of genius at its apogee. This book is radiant. From the first page to the last the reader is handed in and out of tumultuous scenes to one splendor after another. There is no weariness here, regret merely that such magnificence must end, yet a regret shuttled with pleasure at the discovery that a new poet and a real one has come. It is cheap to say that art has no frontiers, that the productions of great minds are the heritage of us all. It is not only cheap, it is untrue. On our degraded stage brilliance such as this would frighten, it would not allure.

THE RE-ESTABLISHMENT OF BEAUTY

Count Tolstoi—unless his translator has traduced him—states in the current issue of "Chapman's Magazine" that French tailors and hairdressers have corrected the errors of Christianity and re-established beauty in its proper place. Ignorant brute that I am this is all news to me. Never before had I supposed that beauty had a place proper or even improper. I had fancied indeed that Christianity provided the world with a new conception of it, and that conception I believed had been in process of development ever since. But I am glad to learn another lesson. I am glad also to learn that French tailors are such an accomplished lot. Their progress has been marvelous. It is two whole years by the clock since I was in Paris, and at the time there was not one among them from whom I would have ordered a coat to wear in a balloon. So long as my memory runs not to the contrary the French have been the worst dressed set of people in Europe. The Beau Brummells of Bourget get their trousers in London to a man. Apart from his novels, however, they are invisible. The Prince de Sagan, who was then the leader of fashion, would never, it occurred to me, die of fits. Times change, customs too, and apparently tailors also. Yet just in what manner they and their first cousins, the hairdressers, can have succeeded in correcting the errors of Christianity and re-establishing beauty in its proper place, it would take a dictionary, it would take more, it would take a Champollion to understand.

THE HISTORY OF LOVE

Count Tolstoi, presumably, has been traduced. Tailor in French means cutter, and in Russian beauty may mean love. These premises accepted, there is in them a light that dawns. The French tailleur—pour dames, bien entendu—is unequaled the world around. Personally, if I may refer to myself, a confection of Paquin's I find more exhilarating than an old master. A decade ago the women whom Worth turned out were better dressed than the empresses of Byzance. The young girls to whom Doucet has ministered are a caress to the eye. Now it is a fact, curious yet not generally recognized, that the history

of clothing is the history of love. Whoso invented the one invented the other. In prehistoric ages, when tattooing was a garment, it has been authoritatively surmised that woman's attractiveness was so meager that she was as incapable of detaining man as animals are incapable of detaining each other. There were herds, not homes. The development of the wardrobe was the development of the affections. The heart of man began to beat when woman ceased to resemble him. But it was not until religion had made her modest and fashion fastidious that his enthrallment was complete. It is for this reason that love dramas, which, apart from mythology, were so infrequent in the past, are so numerous in modern history. It is the idealization of woman that causes them. That idealization is the product, first, of Christianity, second, of time. With Christianity came a higher conception of decorum, with the other a fresh conception of dress. It was centuries before both were adopted. When they were idealization began. Then at once where the boor had been the knight appeared. In place of the female came the lady. And woman, who hitherto had served, began to reign. The history of clothing is the history of love. That, presumably, is what Count Tolstoi intended to say, and it is shameful of his translator not to have let him.

POETRY FOR THE PARLOR

Mrs. Ella W. Wilcox states, in what is apparently a new edition of her verses, that of the twelve hundred poems which she has written a few are of an extremely fiery character. Mrs. Wilcox adds: "The excitement of mingled horror and amaze seems to center upon four poems, namely: 'Delilah,' 'Ad Finem,' 'Conversion' and 'Communism.' . . . I consider 'Delilah' my finest effort." Here is a stanza from "Delilah":

"She touches my cheek, and I quiver—
I tremble with exquisite pains;
She sighs—like an overcharged river
My blood rushes on through my veins;
She smiles—and in mad-tiger fashion,
As a she-tiger fondles her own,
I clasp her with fierceness and passion,
And kiss her with shudder and groan."

I consider that a fine effort too. But I prefer it in French.

Comme c'est doux de se tordre
Dans nos bras amoureux,
Et puis de se mordre
En heulant tous deux.

There is a little quatrain which has the merit of being more concise than this lady's octave, in addition to conveying the same idea at first hand.

THE AESTHETICS OF THE PLAIN

Mme. Arvede Barine has entered a protest against feminine homeliness. This protest, which appears in a recent issue of the "Figaro," presupposes on the part of the new woman the declaration of the right to be plain. Mme. Barine alleges that, practiced on a large scale, it would be the death of love. The lady advances other arguments, but as they are not entirely coherent, the point at issue need alone be considered. To begin with, is there such a thing as a plain woman? Considered in the abstract, only the beautiful are homely. A plain woman may be defined as one who, however fair, neglects to please. The picture gallery of heroines is largely composed of those who were clever enough to understand that while good looks may attract, graciousness enchains. Unaccompanied by other attributes, beauty alarms when it does not weary. It is for this reason, perhaps, that to the average man the most beautiful woman in the world is always the woman whom he has yet to meet. A beautiful woman who contents herself with being merely beautiful is plainer than any plain woman who does nothing but beautiful things. With every deference to Mme. Barine, in the Evangel of Women it is written: Blessed are the plain who succeed in charming, for theirs, and theirs only, is the Kingdom of Love.

THE SURPRISES OF SCIENCE

Mr. Szczepanik is a gentleman who deserves attention and who presumably will get it. He has invented an instrument the principle of which is similar to that of the telephone, with the difference, however, that it is not for the ear but for the eye. It is called the Fernseher, which, being translated, means Far-looker. It enables one to see round the corner. Editors of the local press won't need it. They are sufficiently omniscient as it is. But the chiefs in the War Department may. It is a pleasure and a duty to signal it to them. Mr. Charles Windsor is another gentleman who deserves attention. He, also, is an inventor. He has discovered and patented a device wherewith bicycle tires become self-inflating. The rider has but to turn a screw, hop on, ride away; the action of the wheel does the rest. Mr. Szczepanik is an Austrian subject. Mr. Windsor is an Englishman. The invention of the first may add new terrors to private life, but the invention of the second will render escape delightfully expeditious.



THE "MAINE'S" LIVING AND DEAD AT KEY WEST

SOME OF THE "MAINE'S" MEN WHO DIED IN HOSPITAL AT HAVANA WERE TAKEN TO KEY WEST FOR BURIAL, WHERE THEY WERE FOLLOWED TO THE CEMETERY BY AN ESCORT OF SAILORS. THE BURIAL SERVICE WAS CONDUCTED BY CHAPLAIN ROYCE OF THE "NEW YORK." THREE OF OUR PLATES SHOW SOME OF THE "MAINE'S" CONVALESCENTS

From photographs by our Special Artist



HAWTHORNE'S VITASCOPE



SUPPOSE nobody can be so detached from mundane troubles as the man whose calling it is to investigate the other earths of the universe. In the astronomical observatory there is always peace. In our churches, we offer up prayers for the political welfare of the country, and listen to sermons advocating or deprecating war. Sitting at home, amid wife and children, in the security of our firesides, we read the newspapers and discuss the chances of battle and the horrors of

famine. But in the observatory there is no mention or thought of these things. The nearest the astronomer gets to this planet is two hundred and forty thousand miles—the distance that separates the moon from us. He does not, however, linger there long; it is too near; he is like the old frontiersman who began to gasp for breath when any one came within five-and-twenty miles of him. Our astronomer is not satisfied with miles; he wants diameters of the solar system; the speed of light vibrations is his yardstick. Mars is the nearest spot where he can sit down a bit and feel at home. He begins to smile and open his shoulders at Jupiter or Saturn; he is striding along at a round pace by the time he passes Neptune; and then, with a sigh of relief, he bestraddles the awful gulf that yawns between us and the nearest fixed star, and disappears cheerfully from view in the mists of the Milky Way. What is the use of talking to such a person about the war in Cuba? "How soon do you think it will be settled?" you inquire. He replies that it will require so many billion ages for Alpha Centauri to alter its apparent position. "But think of those starving folks in Matanzas!" you continue. He refers you to the fact that a thousand million years hence the sun will have cooled down, and all the inhabitants of this solar family will have frozen into icicles. "Have you pictured to yourself the terror of the moment when the *Maine* was blown up in Havana Harbor?" you want to know. At this he smiles a fearful smile, and, saying something about a recent collision of two planets adjoining a nebula of Orion, is off toward the north, probably on a hunting expedition after the Great Bear. Sometimes I feel inclined to go with him.

Yes, it is healthy once in a while to remind ourselves of the relations of things in this Creation, to breathe infinite space, to cool our little fevers in its absolute zero, to set our watches by the Precession of the Equinoxes, and to seek a quiet corner for meditation somewhere behind the back stars. Hitch one end of your hammock to Sirius, and the other to Arcturus, and compose yourself for a nap of a few stellar periods; when you wake up, the matters that so concerned you here will have adjusted themselves.

The proximate cause of these remarks was the account of the new telescope-microscope which has been designed by some German officer whose name I forget; but if his invention turns out a success, his name will be remembered almost for a stellar period. I am not proficient in optical science; but I am always ready to believe that any good thing may come to pass; and when this gentleman tells me that he will bring the moon within a hundred yards of my window, I accept the statement with joy and faith. He has got round the old difficulty of the absorption of light by the lens, which put a stop to its development beyond a certain point; he makes you a mirror fifty yards across, which concentrates so much light on the critical point that you may magnify the object by millions, and yet discern its slightest details. Now, then, off we go! Be careful, or you will bruise your shins on the moon as we sweep by; her mountain ridges are very sharp, and a good deal more than three hundred feet high, which is our margin of safety. Here we are at Mars, which remains at a respectful distance of a mile or so. We are poised right over the junction of half a dozen of her canals; yonder is quite a large city; you can see the people moving about; they are men and women very like ourselves, only more slender and uniformly good-looking; and dear me! what a keen and penetrating expression they have. They would feel little interest in matters that absorb us; they have got beyond the material stage of development; they are occupied with the science of causes, which takes them far and deep. You observe that their dress and surroundings are markedly simple and unpretentious; they can get all they need for life without working for it; they can transform matter at their convenience by a slant of thought, and of course there is no temptation for them to make an outward display. But they seem rather proud and haughty nevertheless, and there is a coldness about them; too much clear intellect, I imagine. There is more truth than love in this planet, and we could not domesticate ourselves in it. Let us go a step further.

So this is Jupiter? I remember being told that Jupiter was too warm as yet to be inhabited; but you perceive that that was a mistake. For that matter, I don't see why human beings should not exist in a planet of incandescent gases, provided of course they were formed of incandescent gases themselves. The human form is the important point; you may choose the

condition of the formative substances to please yourself. No doubt, we could not invite gas people to dinner; we could not associate with them in business; the fire insurance companies would disappear like the Snark, which was a Boojum. But we might comprehend and sympathize with their ideas, were we able to get hold of them; and we should find them very nice people.—But we are not in the sun—we are in Jupiter, and they have long ceased to be incandescent there. How dense this atmosphere is; it is almost liquid; and these folks are very different from the cold and arid Martians, who know so much. The Jupiter people have no science, I should say; they are very artless, humble and innocent; but they have intuitions, which serve all their needs. They have no opinion of themselves; they are hardly aware of the Ego at all; they believe they are mere creatures of an infinite and loving Power; and they are very grateful for not being worse than they are. They are very tender and helpful to one another, and cannot be brought to understand that they deserve anything; all they possess seems to them a free gift, for which they can never hope to make any return: the debt goes on accumulating all their lives. They swim about in their thick medium, and are modest about showing their faces, lest the nothingness that is themselves should give the observer offense. "There is nothing but God," they declare, turning timidly away. Yes, they are extremely foolish and childlike; and yet there is something touching and lovely about them, as in our own infants. But the temptation to make sport of them, to perplex and fool them, is too great for us; we had better be going. Besides, that intuition of theirs might happen to be brought to bear on us, with effects not altogether flattering.

Here is Saturn; let us pause a moment here. The surface of the planet is beautiful but wild; there are no cities and little cultivation. Evidently the people live much as our Indians did; only they do not hunt or kill; they subsist on fruits and grain; there is no going on the warpath for them. They are a race of lovers; you may see them going about in pairs, hand in hand, with an expression of happiness that makes our own hearts yearn; for there are no mismatings in this world; every youth finds the maiden specially created to make him happy and to be made happy by him; and they never leave each other. There are no tribes and nations among them; but there are little households, with the father and mother united in domestic affection, and the children growing up to become lovers in their turn. That seems to be their whole business in life; they require no outside excitement to keep them happy; they need no occupation but the constant one of devising means of giving one another felicity. They build no monuments and dig no tombs; they exist from moment to moment with no regrets and no apprehensions; they look in each others' eyes and listen to each others' voices, and are content. They can suffer no losses, for they have no possession but each other; they fear no death, for they believe that a future life will but unite them more intimately. How clear and serene their faces are; and when the husband and wife turn toward each other, do you notice how a light seems to glow from them! This is the world of happy marriages; and overhead, that broad band which arches from horizon to horizon, white like cirrus clouds, may typify the marriage ring which is their symbol. How gloriously radiant it must be at night, with a light like that of ten thousand moons. Shall we take up our residence here? Hardly: our golden age, if ever it existed, is too far behind us for us to have the power of entering into the life of these people with comfort and sympathy. We should soon feel bored; we would languish for lack of society, and Wall Street, and the daily newspapers. No wars here, no voyages to the North Pole, no divorce scandals. It is all very well to be happy though married; but we are content to leave that sort of enjoyment to the Saturnians, and seek something better suited to ourselves elsewhere.

Well; we are standing now on the brink of that great gulf, looking across to the Pleiades. Shall we take a flight across? It hardly seems worth while; besides, it is a perilous trip. What if we should get lost in that sable immensity, which plunges down below the roots of things, and ascends aloft further than imagination can reach? And if in our own little family group of planets we found no place to rest our foot or lean our head, what probability is there that we should have better fortune among those remotely glittering points of light? There is a spiritual meaning in distance; when we have crossed it, still, we have not arrived. For each of us there is his appointed place beyond which he cannot stray. The human race is illimitable; but it is divided according to its varying genius; the eternal laws of order which separate it cannot be disregarded. So let us be getting back home, where the war and famine in Cuba are still going on.

JULIAN HAWTHORNE.

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UNDER THE SUN



SPIRITUALLY minded youth of the sort called in priestly circles "seraphic" has been known to lay aside with almost unregenerate emphasis his *Imitation* and thus commune with the inner man:

"You are a miserable sinner, weak, wicked and prone to evil, but bad enough to need Thomas à Kempis every night—you are not!"

How his ghostly fathers regard this act of rebellion neither he nor they divulge.

To the unprofessional observer there would seem to be a healthful strain in it: even a faint echo of Job's magnificent *I will maintain mine own ways before him or I will not remove mine integrity from me.*

Assuming that great cosmic entities—angels, if preferred—deign to interest themselves in the idiosyncrasies of our humble genus, it must be a recognized fact in choicer circles of the universe that it is easy for us to lie under a tree and think noble thoughts, but singularly difficult to do the smallest thing we ought, if it goes against the grain.—This is the nature of the animal.—Yet we get up and do it—at intervals. In this procedure we are apt to be lonely. For conscience, if a Röntgen ray in the case of a St. Francis of Assisi, to us of low degree may be a more fickle and confusing friend than the good books intimate. He grumbles enough, to be sure, when it is too late to mend matters, but he seems by no means in every instance a stalwart and authoritative Commander of the Faithful. Sometimes indeed he is disgracefully apathetic. He may even look the other way. It is said that we are left thus to blunder and stagger on, because otherwise we should not learn self-reliance. And we are allowed to feel a purely academic satisfaction in the probability that we are gaining it—some-what at the rate a stalactite increases in size. Pondering upon these things, one wonders, with at heart neither irreverence nor flippancy, in what respect our racial development would be blighted, were we, instead of confronted continually with the depressing tale of our iniquities, officially approved from time to time. Imagine from some transcendent source a word of good cheer, which freely translated might run:

"You're all right, little Homunculus. Keep on as you're going. Of course you are a mean object and you know it. Still, handicapped as you were at the start and are, you've done about as well as you could and *as was intended.*"

For have we done what was *not* intended? Is it conceivable man has achieved a badness that has thwarted the mysterious motors of the universe? . . . But this is poaching upon the preserves of the wise.

Consider the lonely little mollusk—bursting in his struggles to be the fittest and survive. Consider, after eons, the lonely little monkey or his first cousin more or less removed, the *Pithekanthropos alalos*, as Gabriel Max presents him to the scrutiny of his posterity. And after cycles, most lonely little man dangling as it were between heaven and earth. A ladder beneath him and a ladder above him—he climbing in spite of himself, with no notion whither. Truly a piteous spectacle. We may be more pathetic than we imagine. . . . Against what odds has the puny ignorant race struggled upward. What agony, and martyrdom, what indomitable patience, what resignation and fortitude, what fiery ardor! Contemplating that valiant ascent, one may be pardoned for a momentary ebullition of family pride. Our courage, at least, must be patent to the universe. Not the courage of clawing and rending which is cheap, but the courage to endure, and, although we behold ourselves, ever to believe in goodness. . . . For all we know that courage may be the divine spark in us. You and I may not be passing brave. "The pusillanimity of honest men" is notorious. Never mind. The race is brave. And whither is Jack climbing on his bean stalk? If the nature of the mollusk has known how to make of itself man, into what shall man evolve? Never into poor Nietzsche's *Uebermensch*. Was not that dedication of resentment, lovelessness and egotism the product of an already diseased fancy? Were two such Franksteins on earth one would slay the other. . . . Nietzsche himself gives us better fare. *Climbing in the mountain regions of truth, he says, is never in vain. If you seem not to go very far to-day, at least you are strengthening your powers for to-morrow's ascent.*

In the Institute for the Blind in Tottenham Court Road, the blind superintendent, apart from his daily work, which would be arduous and complicated for any man, has for years devoted his few hours of leisure to music and botany. In his home he has built himself an organ which he plays. With professional botanists he often has the best of the argument. His general information is of no mean order. But these gifts, however admirable, are not occult. He has others. With no guide he cheerfully braves the densest London traffic. His inner pilot

leads him where is just space for him to pass between 'buses, cabs, giant vans, the hoofs of high-steppers, and all the interminable moving mass that makes the crossing of London thoroughfares not the simplest thing in the world for people with eyes—for "sighted persons," as the blind say. He can tell you accurately whether he is passing buildings of wood, brick or stone. You ask him how. "By the change in the air," he replies. Whereupon you become painfully aware that in comparison with his sensitiveness you are but a coarse creature. Strolling in the country, he feels, at some distance, the presence of a tree. . . . "Why, that's easy enough. When you enter a room you know it, don't you? Because the air is inclosed. It's exactly the same on the road. The tree breathes. Of course you notice it. You find less air there. . . . It is nothing. You can do it yourself if you try. We all have the same powers, but we do not all use them."

And when we all use them—these subtler perceptions of the blind? When, too, thought-transference, the wireless telegraph, thought-photography, and all the kindred innate powers—upon which Baron Dr. Karl Du Prel here in Munich discourses, for our enlightenment or mystification, as the case may be, in his *Society for Scientific Psychology*—shall be no longer visions of wonderland, but simple facts of existence? When more marvelous attributes, as yet but vaguely imagined, shall reveal themselves to us as our birthright, and we become, in truth, "land-lords, water-lords, air-lords?" Shall we not even then still be slowly climbing that infinite ladder of fate—*ad astra*? Though we die by millions, do we ever depart from it? . . . "Until man has learned to control the ether as he can bend leather, there will be no end to human miseries," says the Upanishad.

Such speculations being necessarily misty, it is a relief to discover a thinker with something definite to propound.

Elizabeth, aged eleven, is the artist of the family: Alice, aged eight, the philosopher.

"Papa," demanded the latter, "what is my soul made of?"

The professor looked up from the pile of books and papers on his study-table, stared at his little daughter, and wondered what in the name of Ptolemy he'd better say now. . . . It was not the first time that her tact had to palliate his crass ignorance.

"Never mind, papa," she continued sweetly—consoling, indulgent. And, after a moment, she added, very blithe and sure: "Elizabeth says it's made of yellow plush." Spake and pranced off.

The undersigned does not propose to be blinded or intimidated by the intense electric effulgence of an adjacent zone in this journal. By the glimmer of her own little rush light she will continue to wend her way. We have an immortal example the man who said he could not help it if the great had previously employed his thoughts. No more is it the writer's fault that the electrical luminosity aforesaid in more than one instance consumed her topics, before she has time to trudge along. Unfortunately there seems to be no way to arrest the scintillating delinquent. Be his beam benign or malevolent, he insists upon distancing competitors, and goes dancing ahead—shining like Lucifer, Son of the Morning. However, it is no use to become disheartened because he alluded last week to "sitting down" and writing. The proper thing to do is not to mind him at all, but calmly to go on and say what one had on one's mind.

The distinguished minority, not as yet on the Tauchnitz or any other list of souls in pain, are prone to gasp enthusiastically: "Oh, I do wish I could just sit down and write a book." Or they let fall, with a haughty negligence which you envy: "I've often meant to write a novel, but I never get time to sit down to it." "Sitting down," then, assumes an unwonted picturesque charm. One recognizes the amiable and widely diffused impression that in literary work attitude is everything and personality counts for naught.

Now one may not know much about these things one's self. But one's friend's friends maintain that writing a book, even a dull one, is not so easy as comin' thro' the rye. Some declare it under the best auspices but a moderately enlivening pastime. Others hint that it is a ghastly thing—not to be undertaken without prayer and fasting. . . . Yet once there was a young woman who could "sit down and write three novels at once and never minded how many persons were chatting in the room." This must be true, for her own mother told it me. I have been greedily watching for those three novels—for nearly twenty years. . . . "In these degenerate days," groaned the German, "we do indeed need a Lessing. *Had I but time!*"

An editor of a weekly journal and a monthly magazine—in other respects active in London journalism—is often fidgeting about on his feet all day long. One has watched him hours scribbling things on disorderly bits of paper—at a desk, an untidy table, the mantel-piece, or even on his knee, one foot (most undignified!) on a chair. The only sort of sitting-down that suits him is when he crouches, cross-legged as a Turk, on the floor and appears to be maliciously tearing holes in his colleagues' newspapers and flinging them about the room.

An author of rare distinction, one of the exceeding few who may justly claim the title, *Woman-of-Letters*, writes lying on her

back in her bed. Her muse happens to prefer this posture behind locked doors, excluding people who ask questions. Sometimes the lady does a bit of pressing work in her hot bath and with a miserable little bitten stub of a child's pencil. Yet most of us might be boiled till we were tough and not achieve her style, still less think the shadow of her thought. So it does not really seem to be the hot water. . . . In the center of Rudyard Kipling's study, near the breezy downs by the sea beyond Brighton, hangs one of those nice things which when punched comes flying back at you. But Mr. Kipling did not explain whether it is from this that he extracts his triumphant genius. . . . These matters are certainly very puzzling. One hardly knows what to think.

Richard Wagner does not figure in the world's history as one afraid to say Boo to a goose. He was not the meekest man since Moses. His enemies—and of this commodity he had his share—never charged him with lack of self-confidence. In his published letters to Liszt, one dated Lucerne, 1859, contains the following passage:

"And people are forever urging 'Work! work! It will be all right!' Oh, yes! Quite so! But poor devil that I am, I have no routine, and if the work does not come of itself I can do nothing at all. In reality, in the very depths of me, I find myself absolutely incapable. You should just see me, wind-bound here before my table, groaning 'Now you must get on!' Then running to my piano and arranging a few wretched chords only to reject them immediately. What thoughts then prey upon me! I am profoundly convinced of my utter worthlessness in music." (Or, literally, beggary. His word is *gneserie*.)

That is the way he "sat down to" his *Tannhäuser* and his *Parsifal*.

Wagner, as his text indicates, beheld bottomless abysses, heaven-defying crags, endless plains, vast space, illimitable distance. Even in Munich, where scenic illusions are frequently extremely artistic and satisfying, and where the *Nibelungen Ring* is probably given as closely according to the precepts of the Master as anywhere in the world—Bayreuth excepted—a very circumscribed Walhalla perches coquettishly over the fourth stage-entrance, R, and the stupendous mountain range where he saw his *Walküren* springing with wild cries from peak to peak is a tame little construction, L, obtrusively near the footlights. The daughters of the gods move gingerly upon it, as if they feared to break it or their ankles. . . . How could Wagner bear to have his boundless imaginings materialized into toys so obvious and puerile. Doubtless he who gazed upon infinite vistas also heard voices corresponding. While we, alas, in the most successful representation—lasting four evenings from half-past six or seven till eleven and after—are apt to feel our chests aching in sympathy with the prolonged strain of vocal inadequacy.

From some stages, Siegfried's dragon is eliminated. Would that he were from all! Though Wagner clung to his *Lindworm*, even arranged his darling's coils and jaws himself, and wanted him well to the front. At Munich they produce him discreetly in the background where his head and tail flap up alternately at regular intervals in a corner, and Siegfried-Vogel capers about the intervening rocks. With the best will in the world one cannot take the pasteboard beast seriously. He reminds one of the Jabberwock or of that delicious animal "called the Jux, because he is not a bear." The dragon should be reserved for the ecstasy of six-year-old audiences.

If a woman can sing *Brünnhilde* as the part should be sung, nothing more ought to be required of her in this incarnation. She deserves the freedom of the earth and the fullness thereof—and usually has both. It is unreasonable to insist that in addition she shall love a horse. The rôle is so great a pull upon voice, mind and body, dubious experiments with strange animals ought not to be supplemented. It is therefore in no capacious spirit that we note frequent evidences of incompatibility of temperament between the Wish-Maid and her charger. *Brünnhilde* is in fact almost always conspicuously afraid of *Grane*.

At a recent delightful representation of the *Nibelungen Ring* at the Court Theatre of Munich was a case in point. . . . *Wotan* and *Fricka* are engaged in their habitual matrimonial infelicities. *Brünnhilde*, having arrived on the wings of the wind, should come leaping down the rocks—joyously leading her steed. *Grane* is a beauty, and evidently tame as a kitten. But he is aware she does not appreciate him, and he sniffs suspiciously at the zigzag descensus *Averni* beneath his noble hoofs. She, holding him at arms-length, advances cautiously. Presently she advances no more. For about half-way down he stops short, turns a knowing eye upon the audience, and smiles humorously. *Brünnhilde*, at the extreme end of the bridge, nervously tugs and jerks. But *Grane*, taking amiss her unwarrantable prejudice against him, refuses to budge, and continues, in his gentlemanly way, to look for pretty women in the first gallery. *Wotan*, most henpecked of gods, is waiting down below, and it seems as if *Brünnhilde* were going to miss her cue. When *Grane*, of his own accord or encouraged from the wings, decides to tread the path of duty. Once down, he takes his stage position and holds it with ease. He evidently has his

own opinion of the trumpets in the orchestra—that they were rather loud that night cannot be denied—keeps "one eye's black intelligence" fixed on them and two ears well up to windward. With *Siegfried*, with everybody except his liege lady, he is on terms of affectionate equality. He invites caresses, noses mildly about—expecting lumps of sugar and is disappointed to discover that gods and heroes in tricots have no pockets. . . . While that adorable creature, greedy neither for applause nor gold, beautiful without paint or padding, commands the stage, it is difficult to look at any other personage. But the question is, Does such an actor, however graceful, intelligent and superior, really enhance the dramatic effect? That is, the effect desired. The unexpected he certainly creates and largely. He introduces a gay divergence. But is it quite fair to the other players? Does he not exhibit his free and unconscious spirit, and particularly his shape, somewhat to their detriment? Involuntarily he takes an unfair advantage of his human colleagues. For many reasons it would be wiser to suppress *Grane*. . . . Any audience, if politely requested on the programme, would evolve him out of its inner consciousness, the dragon to boot, and the entire Wagner-menagerie. Then we could better listen to the glorious music.

The little matter of representing eight unmistakable *Walküren* careering high in storm-clouds, and bearing dead heroes from the field of battle straight to Walhalla, has projected plentiful anathema in the wake of great Wagner's shade. Paris paid more than twenty thousand francs for stuffed animals which, stiff as your clothes-horse, promenaded the sky from right to left and back again—return ticket on the same elevated line. Dresden and Breslau shoot magic-lantern pictures across the scene. In Munich a similar method produces indistinct apparitions which might be scarecrows or witches on broomsticks.

It recently occurred to the Director of the Breslau Opera that the Kinematograph might solve this vexed problem. Whatever the result, in his preliminary experiments was a pleasing animation. Experts and instruments were summoned from Berlin. After a dress-rehearsal in the Breslau Tattersall, *Walküren*, photographers and theatre magnates assembled on the Gandauer drill-grounds.

Grane, a spirited animal, very properly resented having a graceful appendage of flowing flax tied to his docked tail. "My own or none," he declared; and, with one adroit circular swing of his stub, repeatedly flung off the indignity with its straps and strings. Finally, small hinderances obviated, the War-Maids mounted. They wore helms borne upon eagle-pinions—supplied by the friendly goose—shining cuirasses and floating raiment. Their great shields and glittering spears were handed them. At a given signal they swept like mad over the field. Astride—because few authorities maintain that the *Walküren* came storming up to Walhalla on side-saddles.

The first trial being successful, the more difficult ride with the fallen heroes followed. Strangely enough, the horses were frantic with fear at the mere sight of these life-sized, stuffed figures, and stood trembling under their awful burdens. Terror lent them speed, for their next flight was magnificent.

Especially brilliant was the horsemanship of the Sword-Maid, *Waltraute*. She came on at a superb gallop across the meadow, halted short at exactly the right distance from the apparatus, leaped with the utmost elegance to the ground, and—Wagner's rubric to the letter—leading her horse, joined the group of sisters. She seemed not to mind that her bare arm was bruised by the armor of the slain warrior lying across her saddle. Hearing herself greatly praised and receiving a gold-piece, *Waltraute* grinned. And sotto voce to *Gerhilde*, she did not remark *Hojotoho! Heiaha!* but hoped her mustache would grow again speedily. For *Waltraute* in her previous avatar was a corporal of hussars.

MUNICH, MARCH, 1905.

BLANCHE WILLIS HOWARD.

NOW SYLVIA'S HERE

Now Sylvia's here
It is the sweet o' the year,
Although the erewhile crimson leaf be sere.
Let the winds shout
Their cruel clamors out;
Let the cold creep
And seal in icy sleep
The last fair blossom that the sight held dear;
Yet there is warmth, yet there is vernal cheer,
Now Sylvia's here.

Now Sylvia's here,
Though skies be dun and drear,
Unto mine eyes they radiant seem and clear.
I have for dower
Hope's sempiternal flower,
Benign and beauteous,
And most miraculous:
The flower of Hope that dissipateth Fear,
And tells my heart of hearts that love is near,
Now Sylvia's here. CLINTON SCOLLARD.



DRAWN BY JOHN LA FARGE

Adapted

THE TURN OF THE SCREW

BY HENRY JAMES

XVI



HAD so perfectly expected that the return of my pupils would be marked by a demonstration that I was freshly upset at having to take account that they were dumb about my absence. Instead of gayly denouncing and caressing me they made no allusion to my having failed them, and I was left, for the time, on perceiving that she too said nothing, to study Mrs. Grose's odd face. I did this to such purpose that I made sure they had in some way bribed her to silence; a silence that, however, I would engage to break down on the first private opportunity.

This opportunity came before tea: I secured five minutes with her in the housekeeper's room, where, in the twilight, amid a smell of lately-baked bread, but with the place all swept and garnished, I found her sitting in pained placidity before the fire. So I see her still, so I see her best: facing the flame from her straight chair in the dusky, shining room—a large, clean image of cupboards closed and diligence vaguely baffled.

"Oh yes, they asked me to say nothing; and to please them—so long as they were there—of course I promised. But what had happened to you?"

"I only went with you for the walk," I said. "I had then to come back to meet a friend."

She showed her surprise. "A friend—*you*?"

"Oh yes, I have a couple!" I laughed. "But did the children give you a reason—?"

"For not alluding to your leaving us? Yes; they said you would like it better. Do you like it better?"

My face had made her rueful. "No, I like it worse!" But after an instant I added: "Did they say *why* I should like it better?"

"No; Master Miles only said: 'We must do nothing but what she likes!'"

"I wish indeed he *would*! And what did Flora say?"

"Miss Flora was too sweet. She said 'Oh, of course, of course!'—and I said the same."

I thought a moment. "You were too sweet too—I can hear you all. But none the less, between Miles and me, it's now all out."

"All out?"—my companion stared. "But what, Miss?"

"Everything. It doesn't matter. I've made up my mind. I came home, my dear," I went on, "for a talk with Miss Jessel."

I had by this time formed the habit of having Mrs. Grose literally well in hand in advance of my sounding that note; so that even now, as she bravely expanded under the signal of my word, I could keep her comparatively firm. "A talk? Do you mean she *spoke*?"

"It came to that. I found her, on my return, in the school-room."

"And what did she say?" I can hear the good woman still, and the candor of her stupefaction.

"That she suffers the torments—!"

It was this, of a truth, that made her, as she filled out

my picture, gape. "Do you mean," she faltered—"of the lost?"

"Of the lost. Of the damned. And that's why, to share them—" I faltered myself with the horror of it.

But my companion, with less imagination, kept me up. "To share them—?"

"She wants Flora." Mrs. Grose might, as I gave it to her, fairly have fallen away from me had I not been prepared. I still held her there, to show I was. "As I've told you, however, it doesn't matter."

"Because you've made up your mind? But to what?"

"To everything."

"And what do you call everything?"

"Why, sending for their uncle."

"Oh Miss, in pity *do*!" my friend broke out.

"Ah, but I will, I *will*! I see it's the only way. What's 'out,' as I told you, with Miles is that if he thinks I'm afraid to—and has ideas of what he gains by that—he shall see he's mistaken. Yes, yes; his uncle shall have it here from me on the spot (and before the boy himself if necessary,) that if I'm to be reproached with having done nothing again about more school—"

"Yes, Miss"—my companion pressed me.

"Well, there's that awful reason."

There were now clearly so many of these for my poor colleague that she was excusable for being vague. "But—a—*which*?"

"Why, the letter from his old place."

"You'll show it to the master?"

"I ought to have done so on the instant."

"Oh no!" said Mrs. Grose with decision.

"I'll put it before him," I went on inexorably, "that I can't undertake to work the question on behalf of a child who has been expelled—"

"For we've never in the least known *what*?" Mrs. Grose declared.

"For wickedness. For what else—when he's so clever and beautiful and perfect? Is he stupid? Is he untidy? Is he infirm? Is he ill-natured? He's exquisite—so it can be only *that*; and that would open up the whole thing. After all," I said, "it's their uncle's fault. If he left here such people—!"

"He didn't really in the least know them. The fault's mine." She had turned quite pale.

"Well, you shan't suffer," I answered.

"The children shan't!" she emphatically returned.

I was silent a while; we looked at each other. "Then what am I to tell him?"

"You needn't tell him anything. I'll tell him."

I measured this. "Do you mean you'll write—?" Remembering she couldn't, I caught myself up. "How do you communicate?"

"I tell the bailiff. He writes."

"And should you like him to write *this*?"

My question had a sarcastic force that I had not fully intended, and it made her, after a moment, inconsequently break down. The tears were again in her eyes. "Ah Miss, you write!"

"Well—to-night," I at last answered; and on this we separated.

XVII

I WENT so far, in the evening, as to make a beginning. The weather had changed back, a great wind was abroad, and beneath the lamp, in my room, with Flora at peace beside me, I sat for a long time before a blank sheet of paper and listened to the lash of the rain and the batter of the gusts. Finally I went out, taking a candle; I crossed the passage and listened a minute at Miles's door. What, under my endless obsession, I had been impelled to listen for was some betrayal of his not being at rest, and I presently caught one, but not in the form I had expected. His voice tinkled out. "I say, you there—come in." It was a gayety in the gloom!

I went in with my light and found him, in bed, very wide awake, but very much at his ease. "Well, what are you up to?" he asked with a grace of sociability in which it occurred to me that Mrs. Grose, had she been present, might have looked in vain for proof that anything was "out."

I stood over him with my candle. "How did you know I was there?"

"Why, of course I heard you. Did you fancy you made no noise? You're like a troop of cavalry!" he beautifully laughed.

"Then you weren't asleep?"

"Not much! I lie awake and think."

I had put my candle, designedly, a short way off, and then, as he held out his friendly old hand to me, had sat down on the edge of his bed. "What is it," I asked, "that you think of?"

"What in the world, my dear, but you?"

"Ah, the pride I take in your appreciation doesn't insist on that! I had so far rather you slept."

"Well, I think also, you know, of this queer business of ours."

I marked the coolness of his firm little hand. "Of what queer business, Miles?"

"Why, the way you bring me up. And all the rest!"

I fairly held my breath a minute, and even from my glimmering taper there was light enough to show how he smiled up at me from his pillow. "What do you mean by all the rest?"

"Oh, you know, you know!"

I could say nothing for a minute, though I felt, as I held his hand and our eyes continued to meet, that my silence had all the air of admitting his charge and that nothing in the whole world of reality, perhaps, was at that moment so fabulous as our actual relation. "Certainly you shall go back to school," I said, "if it be that that troubles you. But not to the old place—we must find another, a better. How could I know it did trouble you, this question, when you never told me so, never spoke of it at all?" His clear, listening face, framed in its smooth whiteness, made him for the minute as appealing as some wistful patient in a children's hospital; and I would have given, as the resemblance came to me, all I possessed on earth really to be the nurse or the sister of charity who might have helped to cure him. Well, even as it was, I perhaps might help! "Do you know you've never said a word to me about your school—I mean the old one; never mentioned it in any way?"

He seemed to wonder; he smiled with the same loveliness. But he clearly gained time; he waited, he called for guidance. "Haven't I?" It wasn't for me to help him—it was for the thing I had met!

Something in his tone and the expression of his face, as I got this from him, set my heart aching with such a pang as it had never yet known; so unutterably touching was it to see his little brain puzzled and his little resources taxed to play, under the spell laid on him, a part of innocence and consistency. "No, never—from the hour you came back. You've never mentioned to me one of your masters, one of your comrades, nor the least little thing that ever happened to you at school. Never, little Miles—no never—have you given me an inkling of anything that *may* have happened there. Therefore you can fancy how much I'm in the dark. Until you came out, that way, this morning, you had, since the first hour I saw you, scarce even made a reference to anything in your previous life. You seemed so perfectly to accept the present." It was extraordinary how my absolute conviction of his secret precocity (or whatever I might call the poison of an influence that I dared but half to phrase,) made him, in spite of the faint breath of his inward trouble, appear as accessible as an older person—imposed him almost as an intellectual equal. "I thought you wanted to go on as you are."

It struck me that at this he just faintly colored. He gave, at any rate, like a convalescent slightly fatigued, a languid shake of his head. "I don't—I don't. I want to get away."

"You're tired of Bly?"

"Oh no, I like Bly."

"Well then—?"

"Oh, you know what a boy wants!"

I felt that I didn't know as well as Miles, and I took temporary refuge. "You want to go to your uncle?"

Again, at this, with his sweet ironic face, he made a movement on the pillow. "Ah, you can't get off with that!"

I was silent a little, and it was I, now, I think, who changed color. "My dear, I don't want to get off!"

"You can't, even if you do. You can't, you can't!"—he lay beautifully staring. "My uncle must come down, and you must completely settle things."

"If we do," I returned with some spirit, "you may be sure it will be to take you quite away."

"Well, don't you understand that that's exactly what I'm working for? You'll have to tell him—about the way you've let it all drop: you'll have to tell him a tremendous lot!"

The exultation with which he uttered this helped me, somehow, for the instant, to meet him rather more. "And how much will you, Miles, have to tell him? There are things he'll ask you!"

He turned it over. "Very likely. But what things?"

"The things you've never told me. To make up his mind what to do with you. He can't send you back—"

"Oh, I don't want to go back!" he broke in. "I want a new field."

He said it with admirable serenity, with positive unimpeachable gayety; and doubtless it was that very note that most evoked for me the poignancy, the unnatural childish tragedy, of his probable reappearance at the end of three months with all this bravado and still more dishonor. It overwhelmed me now that I should never be able to bear that, and it made me let myself go. I threw myself upon him and in the tenderness of my pity I embraced him. "Dear little Miles, dear little Miles—!"

My face was close to his, and he let me kiss him, simply taking it with indulgent good-humor. "Well, old lady?"

"Is there nothing—nothing at all that you want to tell me?"

He turned off a little, facing round toward the wall and holding up his hand to look at it as one had seen sick children look. "I've told you—I told you this morning."

Oh, I was sorry for him! "That you just want me not to worry you?"

He looked round at me now, as if in recognition of my understanding him; then ever so gently, "To let me alone," he replied.

There was even a beautiful little dignity in it, something that made me release him, yet, when I had slowly risen, linger beside him. God knows I never wished to harass him, but I felt that merely, at this, to turn my back on him was to abandon or, to put it more truly, to lose him. "I've just begun a letter to your uncle," I said.

"Well then, finish it!"

I waited a minute. "What happened before?"

He gazed up at me again. "Before what?"

"Before you came back. And before you went away."

For some time he was silent, but he continued to meet my eyes. "What happened?"

It made me, the sound of the words, in which it seemed to me that I caught for the very first time a small faint quaver of consenting consciousness—it made me drop on my knees beside the bed and seize once more the chance of possessing him. "Dear little Miles, dear little Miles, if you *knew* how I want to help you! It's only that, it's nothing but that, and I'd rather die than give you a pain or do you a wrong—I'd rather die than hurt a hair of you. Dear little Miles"—oh, I brought it out now even if I *should* go too far—"I just want you to help me to save you!" But I knew in a moment after this that I *had* gone too far. The answer to my appeal was instantaneous, but it came in the form of an extraordinary blast and chill, a gust of frozen air and a shake of the room as great as if, in the wild wind, the window had been blown in. The boy gave a loud, high shriek which, lost in the rest of the shock of sound, might have seemed, indistinctly, though I was so close to him, a note either of jubilation or of terror. I jumped to my feet again and was conscious of darkness. So for a moment we remained while I stared about me and saw that the drawn curtains were unstirred and the window tight. "Why, the candle's out!" I then cried.

"It was I who blew it, dear!" said Miles.

XVIII

THE next day, after lessons, Mrs. Grose found a moment to say to me quietly: "Have you written, Miss?"

"Yes—I've written." But I didn't add—for the hour—that my letter, sealed and directed, was still in my pocket. There would be time enough to send it before the messenger should go to the village. Meanwhile there had been, on the part of my pupils, no more brilliant, more exemplary morning. It was exactly as if they had both had at heart to gloss over any little recent friction. They performed the dizziest feats of arithmetic, soaring quite out of my feeble range, and perpetrated, in higher spirits than ever, geographical and historical jokes. It was conspicuous of course in Miles in particular that he appeared to wish to show how easily he could let me down. This child, to my memory, really lives in a setting of beauty and misery that no words can translate; there was a distinction all his own in every impulse he revealed; never was a small natural creature, to the uninitiated eye all frankness and freedom, a more ingenious, a more extraordinary little gentleman. I had perpetually to guard against the wonder of contemplation into which my initiated view betrayed me; to check the irrelevant gaze and discouraged sigh in which I constantly both attacked and renounced the enigma of what such a little gentleman could have done that deserved a penalty. Say that, by the dark prodigy I knew, the im-

agination of all evil had been opened up to him: all the justice within me ached for the proof that it could ever have flowered into an act.

He had never, at any rate, been such a little gentleman as when, after our early dinner on this dreadful day, he came round to me and asked if I shouldn't like him, for half an hour, to play to me. David playing to Saul could never have shown a finer sense of the occasion. It was literally a charming exhibition of tact, of magnanimity, and quite tantamount to his saying outright: "The true knights we love to read about never push an advantage too far. I know what you mean now: you mean that—to be let alone yourself and not followed up—you'll cease to worry and spy upon me, won't keep me so close to you, will let me go and come. Well, I 'come,' you see—but I don't go! There'll be plenty of time for that. I do really delight in your society, and I only want to show you that I contended for a principle." It may be imagined whether I resisted this appeal or failed to accompany him again, hand in hand, to the schoolroom. He sat down at the old piano and played as he had never played; and if there are those who think he had better have been kicking a football I can only say that I wholly agree with them. For at the end of a time that under his influence I had quite ceased to measure I started up with a strange sense of having literally slept at my post. It was after luncheon, and by the schoolroom fire, and yet I hadn't really, in the least, slept: I had only done something much worse—I had forgotten. Where, all this time, was Flora? When I put the question to Miles he played on a minute before answering, and then could only say: "Why, my dear, how do I know?"—breaking moreover into a happy laugh which, immediately after, as if it were a vocal accompaniment, he prolonged into incoherent, extravagant song.

I went straight to my room, but his sister was not there; then, before going downstairs, I looked into several others. As she was nowhere about she would surely be with Mrs. Grose, whom, in the comfort of that theory, I accordingly proceeded in quest of. I found her where I had found her the evening before, but she met my quick challenge with blank, scared ignorance. She had only supposed that, after the repast, I had carried off both the children; as to which she was quite in the right, for it was the very first time I had allowed the little girl out of my sight without some special provision. Of course now, indeed, she might be with the maids, so that the immediate thing was to look for her without an air of alarm. This we promptly arranged between us; but when, ten minutes later, and in pursuance of our arrangement, we met in the hall, it was only to report, on either side, that, after guarded inquiries, we had altogether failed to trace her. For a minute there, apart from observation, we exchanged mute alarms, and I could feel with what high interest my friend returned me all those I had from the first given her.

"She'll be above," she presently said—"in one of the rooms you haven't searched."

"No; she's at a distance." I had made up my mind. "She has gone out."

Mrs. Grose stared. "Without a hat?"

I naturally also looked volumes. "Isn't that woman always without one?"

"She's with her?"

"She's with her!" I declared. "We must find them."

My hand was on my friend's arm, but she failed for the moment, confronted with such an account of the matter, to respond to my pressure. She communed, on the contrary, on the spot, with her uneasiness. "And where's Master Miles?"

"Oh, he's with Quint. They're in the schoolroom."

"Lord, Miss!" My view, I was myself aware—and therefore I suppose my tone—had never yet reached so calm an assurance.

"The trick's played," I went on: "they've successfully worked their plan. He found the most divine little way to keep me quiet while she went off."

"Divine?" Mrs. Grose bewilderedly echoed.

"Infernal then!" I almost cheerfully rejoined. "He has provided for himself as well. But come!"

She had helplessly gloomed at the upper regions. "You leave him—?"

"So long with Quint? Yes—I don't mind that now."

She always ended, at these moments, by getting possession of my hand, and in this manner she could at present still stay me. But after gasping an instant at my sudden resignation, "Because of your letter?" she eagerly brought out.

I quickly, by way of answer, felt for my letter, drew it forth, held it up, and then, freeing myself, went and laid it on the great hall-table. "Luke will take it," I said as I came back. I reached the house-door and opened it; I was already on the steps.

My companion still hung back: the storm of the night and the early morning had dropped, but the afternoon was damp and gray. I came down to the drive while she stood in the doorway. "You go with nothing on?"

"What do I care when the child has nothing?" I cried. "I can't wait to dress, and if you must do so I leave you. Try meanwhile, yourself, upstairs."

"With them?" Oh, on this, the poor woman promptly joined me.

(To be continued.)



MEN MANNERS AND MOODS

LXXXIV



INFORMATION has reached us here concerning a certain Alfred Reidel. This gentleman has conceived a mode of reaching the North Pole on which the Johns Hopkins University has beamed with its blandest smile. Ingenuity and audacity wrangle but too plainly for a chief place as the ruling deity of Mr. Reidel's future fate. First of all he would begin with a boat. Common-sense has at least this consolation in attempting to deal with his movements. We then learn that it would be a submarine boat and would be taken to Spitzbergen. So far, so lucid. But afterward things become awesome, not to say crepuscular. Mr. Reidel's next design is to follow Nansen's route up to the time when the *Fram* became helpless. After this, we are apprised, the boat of our new explorer would proceed under the ice till it reached the Pole. If there were no open sea at this particular (I may add, this highly particular) point, the amphibious Mr. Reidel wouldn't care in the least. Down there under the ice he would have a great big steel screw and would bore his way up with serene pride. Thus, if he couldn't sail on the Pole he would be able to stand on it, and standing on it somehow has a much more probable sound. People, as we know, do stand on poles. I think I have seen them do it (though more or less wobblingly) at the circuses. After all, too, it oughtn't to be much more difficult than standing on one's inch of dignity, which is a feat often accomplished with some success. Mr. Reidel, if I may venture to affirm so, doesn't accomplish it in this particular, for he subjects himself to the rather pardonable sneers of incredulity. Given the boring of the large hole through twenty feet or more of ice; given the submarine vessel below it; given the safe ascent (Heaven knows how achieved) from hole to Pole—and what do we have? Unless I sadly err, a good deal of Munchausen impudence and a good deal of responsive melancholy regret. Edison's "miracles" have done the world vast good. But they were sure to be retroactive in a less salutary way. Everything casts its shadow. Mr. Reidel may be called part of such shadow, and this in turn may cumulatively be termed the multitudinous vaults of impostors.

If London should maintain silence regarding Oscar Wilde's "Reading Gaol" poem, I hope New York will prove less reticent. What a human being does and what he writes are not to be confused with one another. Hideous faults may accompany the possession of genius, and genius is golden, we should remember, no matter how darkly streaked be the ore in which it is found. I have recently learned that one of the most surpris-

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"Say, Chimmie, ain't it queer how folks what has greatness don't seem to care for it? Now look at him, how easy-like he takes bein' wot he is!"

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