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#### NEW YORK, SATURDAY, APRIL 9, 1898.

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THE OFFICIAL REPORT OF THE "MAINE" DISASTER. It is not within the province of the SCIENTIFIC AMERICAN to discuss the political aspects of the problem which confronts this country with regard to Cuba. It is not for us to determine whether the present condition of this unhappy island, blighted as it is by all the miseries of a two years' war, can be considered as affording a  $casus \ belli$  between ourselves and Spain.

The blowing up of the battleship "Maine," however, presents a problem of an entirely different complexion -one that has touched the nation to the quick. How deeply we have felt the loss, and appreciate the terrible circumstances attending it, is shown by the significant, the portentous, calumess and self-restraint with which the situation has been endured. The attitude of the public has been one of anxious and patient expectation, in which hasty conclusions and precipitate actions have met with universal disapproval.

The report of the Naval Court was made public by the President without a word of comment on Monday, March 28, and with regret we have to say that the worst fears have been realized and the suspicion that the "Maine" was destroyed by a submarine mine is fully confirmed.

The summary of the official report has been published in the daily press and is already widely known. On another page we reproduce the most important drawings which accompany the report, by studying which the present condition of the wreck will be made perfectly clear to our readers.

The appearance of the wreck, as indicated by the drawings, proves not only that the ship was wrecked by explosives placed beneath her, but that the mine must have been of vast size and power. No automobile torpedo could have blown the central portion of the hull out of existence and forced the keel at frame 18 right up through the body of the ship through a vertical distance of thirty-four feet. We have on record, thanks to the Chilean war, concrete evidence of what effect a Whitehead torpedo will have against the hull of a ship like the "Maine." In that war the "Blanco Encalada" was struck below the water line, at about the same point on the port bow as the "Maine," by a torpedo carrying 175 pounds of guncotton. The result was a horizontal rent in the plating, twenty-five feet in length and not over five feet in width at the widest part. The ship was raised and repaired, the injury being quite local. If it took 175 pounds of guncotton must have taken a simply enormous amount of explosive to produce the awful wreck of the hull of the Maine" which is shown in the official drawings referred to. The tearing open and throwing back of the decks was undoubtedly the result of the subsequent explosion of one or more of the magazines within the ship.

The scale on which the scheme of destruction was carried out was too elaborate for execution by private, individuals, and it is unlikely, on account of the risk to general shipping, that the mine was left to be exploded by being struck by a moving vessel. The Maine," lying at anchor, would swing about with change of tide over an arc some 700 feet in diameter. The exact location of the mine must have been understood by the conspirators on shore, and careful observation of the exact position of the "Maine" must have electrically exploded at the exact moment at which the ill-fated battleship floated over the fatal spot.

The authors of this horrible catastrophe are unmachinery," and that the "favorable circumstances" known. In all probability the solution of the ques-<sup>E</sup> tion will ever remain a mystery. It seems, however, will depend on the size of the orders he can dispose of to the public. When any competitor may manufacimpossible that a mine containing many hundred pounds ture and sell without any cost of experimentation (the of guncotton or similar explosive could have been inventor having done all the experimenting), the large placed under the vessel after she was anchored there. orders and "favorable circumstances" of the inventor If a mine had been placed there before this particular will be made impossible. It is very clear that the inpoint of anchorage had been selected, it must have ventor's "favorable circumstances" are not worrying been with the knowledge of the authorities. The fact the sponsors. The Commissioner of Patents is required that this place of anchorage was an unusual one and to keep accounts, not of one person, firm or corporathat, according to the reported evidence of Capt. Stevtion, but of all persons, firms and corporations seeking ens, of the "City of Washington," it was the least used 18571 18566 to manufacture the inventions of others-a pleasing buoy in the harbor, and no warships had been moore prospect to an official who is not given assistants there, to his knowledge, for five or six years, lends food enough to carry on expeditionaly the ordinary routine  $\pi$  for a terrible suspicion. It is doubtful, however, after business of the office. The Commissioner, under the 6 all has been said and done, whether the circumstantial evprovisions of this bill, however, would be expected to idence surrounding the case can do any more than sugpossess not only the vast knowledge and learning and gest a strong suspicion of complicity on the part of some <sup>i</sup> individuals who were familiar with the harbor and the experience that is now looked for in the incumbent of conditions existing there. It is probable before this that office, but he will require an intellectual equipissue, on which we are now going to press, is published ment far transcending the marvelous endowments of the all-wise Solomon; for he will be called upon to tell that the question of war or peace arising out of the political questions before mentioned will have been deat a glance the proper value and fix a fair royalty upon cided upon. Should this not be the case, we see no the 20,000 or more patents which are issued annually. <sup>2</sup> reason why the question of the "Maine" explosion As every one knows who has had any experience in <sup>6</sup> should not be adjusted consistently with our honor patent matters, there is no more difficult matter to deand the humiliation of Spain, without the terrible termine than the market value of an untried or undeveloped invention. Merit alone does not enable one to arbitrament of the sword. determine such a value, as it is necessary that there It does not seem to us that indemnity for the loss of the "Maine" would be an improper course for us to should be a market: and the market value will fluctake. It is certain, however, that whatever form of in- tuate with the extent and nature of the demand, and demnity may be determined upon, it must include the with the character and financial sesources of those who ultimate independence of the island of Cuba. We seek to obtain possession of the rights under the patent,

speak of indemnity, not because we feel that the loss of the poor fellows on the ill-fated battleship is one which can be determined in cold dollars and cents; not be cause we feel that a punitive award would repay us for the loss of the noble vessel under such circumstances; not because it is possible that an affair in which one's honor is involved can be treated as a commercial contract, but because this is the end of the nineteenth century and the time has been reached when differences, no matter how great their gravity, arising between nations as between individuals should be settled in some other manner than by force of arms. We have reached the period when a new century is about to dawn, and with it, we hope, a civilization that will enable us to settle our quarrels on a plane somewhat higher than that of the savage. All praise is due to the chief executive, who, during this time of crisis, has taken a wise and honorable course, and whose aim has been, as we believe it will be to the end, to preserve peace with honor.

## A "QUEER" PATENT BILL.

At this season of the year Congress is usually deluged with a mass of patent bills, which, as a rule, are a mixture of good and evil. Some of them are drawn in entire ignorance of the aims, purposes or working of our patent system. Some of them are introduced to advance the peculiar theories of some enthusiast or to promote the particular interests of some locality. Some are introduced by members of Congress in good standing, but at the request of some constituent whose influence may not be disregarded. Some are introduced through motives that it would require the art of the Magi to understand, and some through no motive at all. We yearly take occasion to comment upon some of these freak bills. This year we have not given this class of legislation the usual attention, owing to war and rumors of war and other matters that have needed urgent attention.

One of the bills that falls within one or the other of the kinds of legislation referred to above is H. R. 5764, introduced by Mr. Reeves. This bill provides that any one may manufacture, sell and use a patented invention upon obtaining permission so to do from the Commissioner of Patents. The inventor is required, before the issue of the patent, to file a sworn statement of the estimated cost of manufacture "under favorable circumstances. and with proper machinery." Any person, corporation or manufacturing company shall have the to produce a local rent in the "Blanco Encalada," it right to begin to manufacture under the patent, with or without the consent of the owner of the patent, upon depositing with the Commissioner a sum not less than one percentum and not more than ten percentum of such estimated cost of manufacture. There is graciously included a provision, beautifully bound with red tape. whereby a fraction of the money thus deposited shall actually be paid to the patentee. Lest the inventor might be influenced by what Poe called "the Imp of the Perverse," and demur to the benevolence thus bestowed on him, there is another little joker provided in the form of an undisguised threat, and his patent is open to proceedings for its condemnation-proceedings well calculated to be short, sharp and decisive. If the subject matter of the proposed law were encountered elsewhere than in a bill actually presented in Congress, it might well pass as a delightful example of humor peculiarly American. Thus, any one having an acquaint-Scientific American Supplement been obtained in order that the mine could have been ance with inventions and patents knows, if he knows anything, that it is very often rather desirable to obtain patent protection here and in Europe before submitting the invention for estimates of the cost of "proper

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