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FRIDAY, DECEMBER 9, 1898.

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APPLIED SCIENCE IN THE NAVY.

Among the technical reports issued from the Government Press, just now, those coming from the departments of the government most active in the war with Spain are of special interest. That of the Chief of the Bureau of Steam Engineering of the Navy Department, Com. G. W. Melville, is now published, and, though brief and businesslike, gives some interesting information of a more or less scientific nature, as well as of a kind to interest the average citizen in a more general way.

The first effect of the demand upon the Department for preliminary work was to 'demonstrate in the briefest and most vigorous manner the necessities, facilities and deficiencies' of the naval establishment. Fortunately, as it proved, the already established policy of keeping at the navy yards ample stocks of material and stores reduced enormously the risks and delays. embarrassments and dangers of a sudden call for active service of every available ship and gun. Much was necessarily done. however, before satisfactory provision could be made for all emergencies; yet it willnever be forgotten that the navy never failed when called upon.

Some work was performed with marvellous despatch. Thus, the old and worn-out 'shell boilers' of the monitors *Manhattan*, *Mahopac* and *Canonicus*, at League Island, were replaced by new constructions in