

SCIENCE:

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Attention is called to the "Wants" column. All are invited to use it in soliciting information or seeking new positions. The name and address of applicants should be given in full, so that answers will go direct to them. The "Exchange" column is likewise open.

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THE SAILOR AS AMATEUR ENGINEER is not always a success. A naval court of inquiry has recently been in session which has revealed some interesting phases of the amateurishness of the "Yankee tar," and of his inclination at times to play the jack at all trades without much regard to consequences affecting either his own reputation or the efficiency of his vessel. It seems that the commander of a naval vessel, assuming himself to be possessed of the requisite professional knowledge, took charge of the engineering of his ship, and "gave the engineer permission" to make repairs only when he (the skipper) saw fit. The chief engineer had been "ordered not to use salt water in the boilers," had been "told that fresh water would be used in boiler No. 3." The captain had told him that "salt water would not be used except at sea;" but the engineer, apparently thinking himself as well informed of the principles and the customs of the case as was the captain, actually did on one occasion fill a boiler with salt water when in port, after some repairs had been made upon it, for the purpose of testing it to ascertain if it was tight. He endeavored to explain to the superior officer, when called upon to defend this practice, that it was for this purpose; but the commander promptly informed him that he cared nothing for his opinion, and so "sat down upon" and "walked over" the junior officer (figuratively speaking, if we understand aright) that the latter

was moved to inquire, mildly of course, whether it was the fact that he was to be "treated like a pickpocket." This is an interesting illustration of the ethics, the amateur engineering, and the manners, accepted, as it would seem, on board at least one of the ships of our great "navy."

We need not here concern ourselves with the ethics of the case. The court of inquiry will probably establish the code for the naval service, and we may presume that the dignity of the amateur-engineer commander will be properly vindicated. No subordinate officer will probably be allowed with impunity to protest against being "treated like a pickpocket" by his senior, whatever be the altitude of the latter on a scale which measures in terms of good sense, good manners, and good feeling, such as becomes a "gentleman and an officer." We may be permitted to doubt, however, that the senior officer will be called seriously to account for any lack of officerlike quality which may manifest itself in his treatment of his juniors—unless the secretary of the navy, Gen. Tracy, who is himself familiar with the accepted ethics of civil life, as well as with the exactions of military "discipline," shall determine to act in the matter. The line which separates the gentleman from the officer is sometimes made so broad, in cases involving discipline and admonition of the junior by his senior, that the latter fails to detect the fact that the two should be, and should always remain, fairly coincident. We may perhaps be permitted to mildly suggest, however, that the importation into the navy of gentlemen, and the deportation of men of other stripe, might apparently be carried on to considerable extent, and with great advantage. The suggestion is with diffidence respectfully submitted to the honorable secretary of the navy.

On the other aspects of the case, as involving a question of chemistry applied to engineering, we may, we think, be permitted to hold an opinion without asking leave of the very respectable, but we think too decidedly amateurish, sailor on horseback who mounts his hobby to such manifest discomfiture of those over whom he is by his commission enabled to ride. If it should prove that the engineer in charge was so grossly ignorant as to imagine that he might safely and continuously employ salt water in his boilers on a long cruise, even though he had surface condensers, and was not aware that the result would be the precipitation of sulphate of lime in large quantity, to the utter demoralization of his coal-pile and the injury of his furnaces, we should say that this officer was right in treating him, not like a pickpocket, to be sure, but with distinct severity. Even an amateur engineer should know better than that; a commanding officer, if fit for his place, should certainly know at least so much. If it should prove that the engineer desired simply to test his boilers for the purpose of detecting a leak, knowing that it requires a temperature approximating 300° F. to cause precipitation of calcium sulphate, we should consider him to be right in using it, and the commander very ignorant, even for an amateur engineer, not to know better than to interfere. There is a popular feeling—which it will probably be very difficult for the aspirant amateur to remove, notwithstanding his acknowledged and unquestionable ability to become a jack at these several trades which go to make a cruise successful—that the commander is placed on board ship to direct its general operations; and that he is given a corps of engineers to attend to details, with which they only are trusted, and with which, as experts, they only can deal; while the amateur-engineer captain, like the amateur-naval architect, even though the latter be the ablest of lawyers, had best keep himself within those lines which bound his own specialty, and play the amateur only in unimportant matters, in which no great interests are involved.

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