

that Sydney harbor must hereafter grow to be one of the most important coaling stations on the coast. Any nation in possession of such mineral deposits may count on a rapid rise in wealth and prosperity. It concerns us deeply to render available, and at the lowest cost, the coal treasures of the Bridgeport mines. We ought, under a well-arranged system of transportation, to be able to purchase in Montreal a ton of coal at \$4, delivered from ship's side; and if we reach that result we can feel more confidence in our ability to become manufacturers, while all anxiety on the score of fuel supply will cease. It may require some time to accommodate our stoves to the use of bituminous coal instead of wood, but when the latter rises to \$7 a cord, invention will be set at work to devise a remedy. The wharf constructed at Sydney harbor, to facilitate the exigencies of trade, is 1000 feet long 35 feet wide, with eight shipping stands, and 51 feet water alongside. We hope our coal dealers will enter on this new trade and while they realize the profits for themselves, be able hereafter to sell us fuel at reasonable rates.—*Montreal Star*.

BREECHLOADING GREAT GUNS FOR THE NAVY.

Captain Sherard Osborn has published a letter on this subject, in which he protests against the conclusion that a muzzle loading gun is better for naval purposes than a breechloader, if only it can be properly constructed. We have waited long; why not wait a little longer, and let us hear what is the result of the practical tests breechloading guns are being put to in German and French hands, before Strasbourg and Belfort, as well as the forts engirding Paris? The Prussians, since 1848, have never made a mistake in needling breechloading muskets, and have thereby kept the lead of all European military Powers. They are testing Krupp's breechloaders in a way no Dartmoor experiments can compete with. The French are so impressed with the superiority of their system that they are adopting breechloaders for all field purposes, and the correspondent of the *Times* at Versailles, whose experience is more varied than that of most of our soldiers or sailors, warns us constantly that the days of muzzleloading guns are gone with muzzleloading muskets. Surely, if we set about it in earnest, all the difficulties in the way of constructing a breechloading gun will be as easily overcome as they have been with breechloading muskets and towing pieces, although fifteen years ago I heard as in my objections to that being possible as there are now to breechloading great guns? Among the many reasons why the Navy would hail a good breechloader, Captain Osborn enumerates the following:—"We are able and ready to work at sea far heavier guns than Woolwich has yet produced, by placing them on turntables or in turrets; but, seeing that this must often be done in a seaway and with rolling motion, the less distance the better between magazine scuttle and gun, over which half hundred weight of powder and six to ten hundred weights of shell have to be carried, and the breech of a gun is always handier to load than the muzzle. In all our ships it is most desirous to avoid the present dangerous exposure of at least four men to a gun while loading at the muzzle: they will certainly be swept away by an enemy's rifle-men or a shrapnel shell. The difficulty of forcing home a heavy mass of iron to the bottom of a rifle bore in a seaway is very great; if not close home, it will burst the gun. A breechloader gun entails less labor

on the gun's crew. The flourishing of rammers and sponges is very picturesque or parade, but the less of that in actual battle the steadier the men are, the longer they last without fatigue, and the cooler their nerves and eyesight for the more important duty of good aim and constant fire. With breechloaders no trouble is given in dragging the gun far enough in to reload after recoil, and it can be so fitted that it shall return to its position immediately the recoil has expended itself, and so keep the port closed with its own self against the intrusion of shot, shell, and bullets. I might go on *ad infinitum* this way," Captain Osborn says, in conclusion, "but refrain, but for all the reasons a naval officer could adduce must be dead against the decision of the military authorities in asserting that, for ship purposes, a muzzleloader is superior to a breechloader."—*Broad Arrow*.

M'DILLE NILSSON.

This curious little episode diversified the performance of the Academy of Music one night. Louisa Kellogg was singing her very best, and looking her very prettiest, conscious that her Swedish rival was in the house, and that the eyes of New York were on them both. Nilsson was dressed in blue velvet, with an abundance of rich lace, and a profusion of diamonds glittering in her golden hair, occupied a prominent box and languidly applauded with her fan on the edge of the box. In the second part of the programme, Clara Louise sang "I'm Alone," was rapturously encored, and gave "Home, Sweet Home" as an encore, and being compelled to return a third time, dispensed with the pianist and seating herself at the piano, poured forth with the most witching richness and poise, Lover's ballad "She's fooling thee." It was noticed that Nilsson listened to this with extreme attention, and when Kellogg gave the lines:

She has rich hair of golden hue,
Take care, take care,
And what she says is not true,
Beware, beware,
She's fooling thee.

Nilsson, with a look of excessive anger, struck the box edge with her fan so angrily as to break it. At this there was a great laugh and a general clapping of hands, the majority of the people believing she had done so in the warmth of her admiration for her sister artist. But her angry look belied this. The invited who were posted were highly amused, for it was evident that Nilsson thought Kellogg's song was a reflection on her heroine's jilting of Gustave Dore. He brought her into notice, made her a public favorite and the idol of Paris; but when she had reached the height she had sighed for she not only broke her marriage engagement with him, but even refused to admit him to her drawing-room as an ordinary visitor. He was in the completest sense of the term forbidden the house.

CORRUPTION IN THE UNITED STATES.—A better example of the way they do things in the United States was never given than that afforded in Governor Hoffman's message relative to the construction of the new capitol at Albany. Three years ago a Commission was organized to look after the matter, the Act expressly declaring that the Commissioners should not commence the construction of the building until they were satisfied that the work could be fully completed for \$4,000,000. They opened their bureau, advertised for tenders and so on; and got so far as to the laying of the foundations, when rumours began to float about that they had

"gouged." An enquiry was instituted, and it has been discovered that no less a sum than \$2,500,000 has been expended by them which they charge to office, travelling and incidental expenses, and to the cost of laying the foundations. If the rest of the building were as expensive as its foundations it is calculated that the new capitol would cost close on to \$20,000,000.

NAVAL MITRAILLEUSES.—The *Standard* says that the introduction of the new engine of war as part of a ship's armament will render it necessary that any vessel exposed to such a mode of attack should have its gunners well under cover. The mitrailleuse in the maintop will ring the death knell of the men in the opposing ship who may be working the guns on the upper deck after the old broad-side model. Gunners below the upper deck may be sought out through the ports by a mitrailleuse worked on the same level. At present a gun is called "protected" if it happens to be placed in such a position that it has armor in front of it. But this kind of protection is essentially imperfect. The enemy cannot launch 400 pound projectiles from his rigging, but he can send a shower of bullets from that quarter, and though he may not smash the gun, he may terrify and kill the gunners. Or if the guns are below the upper deck, the bullets may rattle in at the port with annoying pertinacity.

AN IMMENSE SALT MINE.—The great Humboldt salt mine near Austin, Nevada, is described by a California paper as looking like a lake frozen over. The salt is as hard and as smooth as ice. Were it not that the fine particles which are condensed from vapors arising from beneath, and which cover the crystalline salt to the depth of perhaps one-eighth of an inch, it would make an excellent skating rink at all times of the year, except on the very unfrequent occasions when it is covered with water. The expense of crystallized salt is no less than twenty miles in length and twelve in width, without a break or flaw for the greater portion of that extent. The stratum of solid salt is about six or seven inches thick, under which comes a layer of sticky, singular looking mud about two feet thick and under this again another stratum of solid salt, as transparent as glass of which the depth has been found in some parts to be six feet. In summer this salt plane glittering and scintillating in the light of an almost tropical sun, presents a brilliant appearance. The frosty covering and the solid salt is as white as snow, while the crystalline portion, when exposed reflects dazzling prismatic colors. This immense deposit is remarkably pure, being ninety-five percent of salt and five percent of soda—which is purer than what we commonly use for our tables.—*Scientific American*.

There are very few persons too old to marry. It is a charitable design of Providence that while we see the mice in our neighbor's eye we cannot detect the beam in our own. Whilst we acknowledge that others should be circumspect we can rarely make up our minds to be so ourselves, when it interferes with preference or convenience. So it was yesterday with an exceedingly aged couple who applied to a justice to join them in wedlock. "Why you are too old to marry," said the magistrate. "N't so," said the lady "he comes about my house so much that if I don't marry him people will talk." She was eighty if she was one day. To this argument there was no reply and the Justice forwirth united them.—(N. O. Pic.