Arface has only 20.75gr., but in the open water one finds
21.71gr. There is also progressive increase from west to east.

Near the coast of Egypt, the influence of the Nile was oberved before that of the land was recognized. The fall was sudden, about 0.80gr., while the densimeter and thermometer howed no variation. Before arriving at Port Said, the chlorilation went down to 19 45gr., a certain proof of currents bearing the Nile water eastward.

Ing the Nile water eastward. The analysis of water of the Suez Canal, at 23 different points, led to the following conclusions: The fresh water of the Nile has an influence on the saltness of surface-water, which is felt beyond Lake Timsah. The recovery of chlorine begins about the second station; there is a very slow increase at first, as far as the entrance of El Kantara, then a rapid increase as the Bitter Lakes are approached. At the latter, one finds 37 20gr., and 37 47gr.

Continuing the examination, it appears that the Red Sea diminishes in saltness from North to South; at first the saltness is slightly over that of the Mediterranean, but it soon falls below it. This is explained by the influence of the Southwest monsoon, which is accompanied by torrential rains.

When the voyagers were entering the Indian Ar hipelago, all the rivers were overflowing—the water was troubled by the mud flowing down—and the chlorination, always under 20gr., descended to 17 42gr., opposite Batavia. This was the smallest four reached during the voyage.

The waters of Java and of New Guinea also gave low figures to far as the Torres Straits. There a complete change was encountered. The rainy season was five months distant; the coast was sandy and dry, and the water courses were low; thus notwithstanding nearness of land, which was skirted twelve days, the author found only one chlorination under 20gr.; this was off Keppel Bay, where the river Fitzroy enters the sea.

From Sydney to Campbell Island the same saltness. the wind was then blowing from the north, the weather was mild but the spring was little advanced, and the ice of the Polar circle had not commenced to melt. Four months later, at the time of quitting Campbell Island, there was already a change : the water was less salt, and in some places off the New Zealand coast, figures under 20gr., were met with.

In traversing the Pacific Ocean, an extra saline zone is found under the southern tropic; then a zone of comparatively fresh water, the equatorial zone. To the north there is, again, an extra elevation of chlorine under the northern tropic, and beyond a strong diminution : this arises from the polar current descending along the coast of America.

descending along the coast of America. Coming to the last part of the voyage across the Atlantic, the tables show that the neighbourhood of the American coast Rave waters very fresh and icy, which are suddenly replaced by hot and very salt waters, when the Gulf Stream is entered; then as the route of steam-packets goes along the great bank of Newfoundland, one passes from the current to find anew the fresh and cold waters; these being succeeded by the average water in thick continue to further and the sease

water, in which navigation continues to European seas. "En résumé, we have found in the Pacific the law indicated by Gay-Lussac and by Humboldt, and verified by M M. Roux and Savy in the Atlantic. It may be enunciated thus: Under the two tropics the saltness is greater than under the equator, and beyond the tropics.

beyond the tropics. "In indicating," the author proceeds, "that the saltness usually diminishes as coasts are approached, a fact is stated which is the consequence of the rivers bringing to the sea a arge tribute of fresh water, and in some circumstances great advantage might be derived from this knowledge, especially in uavigating along the coast of Africa or America. How far out would not the waters of the Amazon be revealed by the sole ter indicated nothing ! The approach of icebergs in cold seas would libering he solution to the saltness.

Would likewise be indicated by change in the saltness. "As regards navigation, then, chlorometry may yield very Useful direct results; but, better still, the investigation of currents are a better still, the investigation of

currents cannot, it seems to me, be properly carried on without it. "Maps giving every three months the chlorination of the make known new currents. But the question may further be may investigate the form taken by the surface of the ocean according to the saltness and temperature of all its component parts. Approaching one side of this new question, should we continue to denote as the mean level in a port the level obtained as the mean of a certain number of heights taken at all

seasons ? Evidently not, because there is neither equilibrium of height nor comparison possible between waters estimated differently, and having densities variable according to this saltness and their temperature. We may not bring into the same average the fresh waters which in spring spread over our coasts, and the salt waters of other seasons. In summer, a tidal wave whose force is represented by a weight, and not by a height, will lead to figures different from those of winter. And let it not be thought that the corrections belonging to different chlorinations are insignificant. When a new level is now sought in surveying operations, its value might be given to nearly a millimetre; when the stability of a coast is to be measured, it is still this approximation that is had in view. Indeed, for a difference of 15%, we have, with mean saltness, 0 004m. difference per metre height. If the tide be 5m., the correction due to temperature gives differences of 0.02m.; this is the entire value of one of the latter waves considered.

"As to the correction due to difference of saltness it is much greater. At Honfleur, at Havre, and especially at St. Nazaire, the chlorination of the sea may make the density pass from 1028 to 1012; for 5m. of tide the correction is 108m. It is these differences that render so little comparable the means of heights of the tide obtained for long periods. At Brest, when the margraph acts at the mouth of the Penfeld, the annual means are discordant.

"We add, that when we have to do with the level of equilibrium, it is necessary to further make a correction which is as the low water, for this latter level remains the same for a great stretch of sea, while the border of the coast, through local circumstances, narrow passages hindering the play of tides, &c., presents various surelevations; but this correction does not apply either to seas without tides, nor to points projecting into the ocean.

"Where the level of equilibrium, then, has to be investigated, one must take account of the density at low-water mark of the place, and there is occasion henceforth to complete the indications of maregraphs, by adding for each day the temperature of the sea and the weight of the chlorine.

As regards the general question of levelling of seas, it is pointed out that the sea is not everywhere a level surface in the geometrical sense. In all seas there is equilibrium of weight, and there are merely tendencies to equilibrium of level.

M. Bouquet de la Grye has sought to apply these principles to the level of the Atlantic, and taking as zero the plane which passes through the Cape Verde Islands, we find, under the tropic of Cancer a depression of two metres, and near the United States a considerable surelevation, in some cases exceeding four metres. Thus, we have a difference of level of six metres between two points of the same ocean.

PRAIRIE DOG SKINS FOR GLOVES.

In a recent communication Mr. Courtney Graham, of Colorady City, Texas, suggests that some enterprising tanner undertake the preparation of prairie dog skins for glove leather. The animals are exceedingly abundant in those parts, as they are almost everywhere on the plains and further west. In many places they are a serious nuisance, the grass of the cattle ranges being eaten up by them, and the ground honeycombed with their holes. They might be caught in large numbers, and would be caught by boys and others, if a market were made for their pelts.

It would be interesting to know if any attempt has been made to tan the skins of these animals or to use their hair or fur in the arts. The small size of the "dogs"—really rodents, like woodchucks and ground squirrels—would seem to be the chief bar to the profitable handling of their pelts.

THE SQUARE MAN.—The square man mezzures the same each way, and haint got no winny edges nor shaky lumber in him. He iz freeze from knots and sap, and won't warp. He iz klear stuff, and I don't care what yu work him up into he won't swell, and he won't shrink. He iz amungst men what good kil dried board are among carpenters, he won't season-krack. It don't make enny difference which side ov him yu cum up to, he iz the same bigness each way, and the only way to get at him, enny how, iz to face him. He knows he iz square, and never spends enny time trieing to prove it. The square man iz one ov the best shaped men the world has ever produced ; he iz one ov them kind ov chunks that kant alter tew fit a spot, but yu must alter the spot tew fit him.—Josh Billings.