

## THE AMERICAN ARCTIC EXPEDITION.

(See page 313.)

Mr. James Gordon Bennett, the energetic proprietor of the New York *Herald*, having, by a liberal expenditure of capital and the indomitable perseverance of Mr. H. M. Stanley, succeeded in opening out the hitherto unexplored portion of the African continent, has now turned his attention from tropical to Arctic exploration, and is organizing an expedition, entirely at his own cost, which is to make yet another attempt to reach the North Pole. For this purpose he has purchased the well known Arctic yacht *Pandora*, which, under the command of Capt. Allen Young, has already achieved important work in the North Polar regions. The *Pandora*, which has been rechristened the *Jeannette* by Mr. Bennett, is a screw steamer of some 250 tons burden, and is fitted with engines of 164 tons of coal, her daily consumption, when steaming four knots an hour, being reckoned at three and a half tons. The hull, for greater safety, is divided into three water-tight compartments, and, since the 1st of April, has been under the hands of the shipwrights, and has been thoroughly and completely repaired, any injured woodwork being removed and replaced by new. In the stern, also, a comfortable cabin has been formed for the officers. On June 18, as we have said above, Mr. Bennett rechristened the vessel the *Jeannette*, and she has now sailed for San Francisco, where her fitting out is to be completed in time to start on her journey next January, when she will attempt to attain the North Pole by way of Behring Straits. At the same time Mr. Bennett will despatch another yacht, the *Davutless*, which will also try to reach the Pole by way of Spitzbergen.

The map of the North Polar region needs little explanation, as it shows the most northerly points which as yet have been reached by the various explorers. The first really authentic Polar expedition was undertaken by Sebastian Cabot, in 1497, with three vessels; and he was succeeded in 1596 by Barents, who discovered Spitzbergen. Hudson and other Englishmen followed up his researches for the next ten years; and, in 1616, Baffin discovered the bay which bears his name, and the now well known Straits of Smith's Sound. In 1740, a Danish navigator in the Russian service, Behring, passed through the straits which separate Asia from the United States. These discoveries, which were mainly made while searching for the North-West Passage, by which the Atlantic and Pacific were supposed to be united, early proved of great value to Arctic navigators, as they opened the three chief roads towards the North Pole, namely, those of Smith's Sound, of Spitzbergen, and of Behring Straits. By the first named several noteworthy attempts have been made to reach the North Pole, beginning with that of John Davis in 1585, when the latitude of Upernavik was attained, down to later days, when Ross and Parry made their well known expedition in the *Alexander* and the *Isabella*. In 1852 Ingfield attained the latitude of 78° 28'; and in the following year the American explorer, Dr. Kane, in the *Advance*, reached the latitude of 78° 45', and, being forced to pass a second winter in the ice, he sent out a sledge expedition under Lieutenant Morton, who reached 81° 20', from which point an open sea was described. In 1860 another American, Dr. Hayes, who had served as a surgeon under Kane, sailed in a little vessel of some 133 tons, the *United States*, and reached 81° 35' by means of sledges; but found Kane's "open sea" covered with ice. In 1871 Captain Hall left New York in the *Polaris*, and reached the highest altitude as yet attained by a vessel, namely, 82° 16'; and next we come to the Nares-Markham expedition in 1875, when Captain Markham, in a sledge journey, reached the highest altitude yet recorded—83° 26'.

The Spitzbergen route will be ever famous by the Franklin-Parry expedition of 1827, when the altitude of 82° 45' was attained, this being the first occasion on which sledges were used by Arctic explorers. In 1868 Dr. Petermann sent Koldewey northwards, when he attained to 81° 5'; and in 1869 Hegeman and Koldewey, in the *Germania* and *Hansa*, reached, in the former vessel, 75° 30'. In 1872 Wilczek fitted out the *Tegethoff*, and intrusted an expedition to the two Austrian explorers, Weyrecht and Payer, who, by means of sledges, reached 82° 5' (the

*Tegethoff* only attained 79° 54'), and discovered Franz-Josef Land. The Behring Straits have been principally explored by Russian expeditions, including those of Anjou and of Wrangell in 1821; but, in 1849, Kellett discovered "Kellett Land" and "Herald Island," since which time no expedition has attempted this route, which is now to be explored by the *Jeannette*. As may be seen by the map, the current in the straits sets northward, towards the Pole, while in Smith's Sound it flows in a southerly direction. Thus, a vessel entering Behring Straits would be assisted on its way by the course of the current, while all vessels going by the Baffin's Bay route lose half their time in combating the stream. The Arctic winds which mainly prevail blow from the northwest, and they cause the floating masses to drive toward the east, and thus open channels on the shores of the Arctic peninsula. A way, therefore, is expected to exist along the coast of Kellett Land, by means of which it is hoped that the *Jeannette* will attain her object. The fact that extremely thin and fragile ice exists in this direction, and that an open sea has been seen by Anjou, Wrangell, and Kellett, tends to corroborate the theory of the advantages to be attained by the choice of this route.

## BRAIN WORK AND BRAIN ABUSE.

When we hear that a man has killed himself by excessive brain work we feel that we should like to have the witnesses in court in order that we might rigidly cross-examine them. What sort of work was it? Was it brain work pure, or was it mixed up with anxiety, worry, and excitement? What were the man's habits? Did he indulge overmuch in what are called stimulants? Did he deprive himself of a just allotment of sleep? If all these questions could be asked and answered we suspect it would be found that the man who is supposed to have died of excessive mental energy died rather of want of fresh air and exercise, of too much fire-water in some form or another, of horrible financial embarrassment, of late hours, and of excitement other than those pure work breeds in the human brain. A distinction is sometimes drawn between imaginative work and intellectual work proper; and the former is said to be the more wearing and the more dangerous. But we suspect there is a fallacy lurking here. Imaginative work, being more exhilarating and producing a greater sense of joy, is no doubt more exciting, but then it necessarily lasts for a shorter time. "Violent delights have violent ends" is as true of imagination as of love. The imagination periodically stops of itself and cannot be made to go on save by those stimulants which, as we have said, help to kill. A man of imagination never shortened his days by allowing his imagination to exercise itself spontaneously; but it is quite conceivable that more than one has done so by artificially calling on it. The imagination should not be so treated. It is too holy a gift and too delicate an instrument to be thus casually instigated to exertion not self-generated. No doubt, at bottom, it is a question of use and abuse, as it is of other forms and capacities of energy. Life is almost certainly not shortened, perhaps a trifle lengthened, and is unquestionably much improved in value, by intellectual vigour; but we fear the people who never think, though their fronto-parietal sutures may ossify early, will continue, as heretofore, to cumber the earth for a greater number of years than they deserve.

THE BEST BAITS FOR INSECT TRAPS.—M. E. C. Carriere has lately been trying a number of experiments on the best baits for insect traps, and gives an account of them in the *Revue Horticole*. The results effectually disprove the truth of the old saying "that we may catch more flies with a spoonful of honey than with a gallon of vinegar." A number of glass fly-traps filled with different liquids, sweet and sour, were placed under some fruit trees which were subject to the attacks of flies and other insects. The traps were baited with honey, weak wine and water, vinegar and water, pure beer, pure wine, crushed pears and water, and other liquids; and the victims were counted, after the traps had been exposed for three weeks, with the following results: The trap containing beer and water stood at the head, and contained 850 flies and other insects; pure beer stood next, with 631; the crushed pears, weak wine, and pure wine coming next, pure honey being at the bottom of the poll, with only 17 sufferers. No doubt the odor of the beer and water, which was in a strong state of fermentation, had a great deal to do with attracting the insects.

TO ATTACH TIN TO METALLIC SUBSTANCES.—Mucilage tragacanth, 10 ozs.; honey of roses, 10 ozs.; flour, 1 oz. Mix.