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SOME SUGGESTIONS FOR FUTURE POLAR EXPEDITIONS

Of the numerous suggestions for reaching the north pole, which the failure of the recent English expedition to attain that goal has elicited, there are two which, apparently more than any of the others, have attracted public attention. The first is that, to cross the palæocrystic sea, which, by reason of its very irregular surface, Captain Nares pronounces impassible by any known means of sledge or like conveyance, balloons may possibly be utilized. The second contemplates the establishment of an arctic station, at as high a latitude as may be practicable, which shall serve as a basis of operations by a party who shall there take up a permanent residence until the object of the enterprise is accomplished. It is expected that, by this last plan, men can be acclimated, so to speak, to the intense cold, the absence of light for long periods, the deprivation of vegetable food, and other hardships of the polar regions; and they may be thus rendered less likely to be baffled by obstacles which have determined the failure of most previous expeditions. A project substantially similar to this is, we understand, already before Congress; and an appropriation of \$50,000, and the ordering of government officers and vessels to the duty is proposed.

The objections urged against the balloon project are, first, that the natural phenomena of cold, etc., would probably act upon the gas, or the envelope material of the air ship, and determine conditions unfavorable to its continued buoyancy; and secondly that, as balloons cannot be steered, the voyagers might find themselves carried anywhere but in the right direction; and that, in case of the balloon failing and compelling their descent far away from their base of supplies, their perishing would be a certainty. We allude to this plan simply because it is open to modification in a manner which we shall point out further on. We have first to suggest a possible improvement on the fixed station scheme.

We do not see the necessity of educating a band of men to dwell under adverse conditions as proposed, when the most that will be required, of all but the leaders, is physical work and endurance; and most especially when the people already fitted by nature for arctic life are at hand on the spot. In other words, we think that it would be much more practicable to engage a number of Esquimaux, bring them South, and educate them up to a point equal to that of the working white men, who would be otherwise employed as pioneers, hunters, sledge haulers, etc. We would teach them the object of the enterprise, and place them under the officers—of course white men—who would furnish the brains, and under whose government the work would be conducted.

It may be argued that the Esquimaux cannot be taught properly to serve the interests of such an expedition. Experience shows to the contrary. They are an intelligent people, and there is not an arctic explorer but can testify to the material aid which they have rendered. Hall and others who have dwelt among them state that they are quick to learn; and as an instance, Hall mentions that he found no difficulty in teaching them the intricate game of chess. They are the only people that can live in the land of no wood. Peschel, in his new work on "The Races of Man," says: "They have found out how to build huts of snow as quickly as tropical natives build them of branches and leaves: nay, they have constructed arched vaults of stone, which had not occurred to any of the civilized people of Mexico." The same authority, summing up their achievements, tells how they warm their huts with train oil lamps, how they invented sledges, and utilized the dog as a draught animal: "while in America, the most advanced stage of such art was to be found only among the Incas of Peru, who used llamas as beasts of burden, though not as draught animals." "Like assistants in the darkness," adds Peschel, "appear beings of our species whose cheerfulness is unaffected by cold and obscurity, and who contentedly wander and range over regions in which Nature seems armed with all the horrors of one of the circles in Dante's hell." We need not recall the invaluable services of Esquimaux Joe in sustaining the sailors of the Polaris on their voyage on the ice floe, or the many instances in which the narratives of arctic explorers quote the value of his people as guides, as proofs of the fidelity of the race.

The expense of maintenance of a party of Esquimaux, with white men as leaders, would clearly be less than that of a party of white men alone. It will further be evident that to dispatch Esquimaux in balloons would be a different matter from sending other people, because, no matter where the balloons might come down, unless in the open sea, the travelers, being used to shift for themselves, would be as much at home as anywhere else. And they would thus be able to support themselves, and also the single white man who might go with them in command. But—supposing of course it be possible to make the gas and the envelope of the balloon withstand the climate—it does not seem to us that high-flying, wind-driven balloons are the proper means to be employed. While any balloon system is open to objections, the low-flying balloon, just capable of lifting one man off his feet so that he can propel himself over the surface with a pole, and by the same means cause his balloon to jump over high obstacles, appears to be the most promising means of locomotion for traversing the palæocrystic sea. A party starting would, therefore, go in as many balloons as there were individuals; and the chances of failure of all the air ships would be materially less than if the expedition travelled in a single large balloon; while there would be the additional advantages of strength of fabric, easy handling, and possibility of stopping during adverse winds by merely mooring the air ships without discharging gas.

MIND READING AND CONJURORS.

We have recently witnessed two exhibitions of the alleged abnormal power of second sight, or, what amounts to the same thing, mind reading. One was the performance of Mr. J. R. Brown, who has acquired considerable reputation as a mind reader. His exhibition consisted in experiments intended to prove the existence of a genuine phenomenal faculty whereby he reads the thoughts of other people. The second was the exhibition of Mr. Robert Heller, the well known conjuror, and his assistant, Miss Heller, wherein the lady, blindfolded, ostensibly saw and described articles not visible to her, but known to the conjuror and his audience. The reader will observe the distinction. Brown seeks to prove a supernatural power by curious experiments. Heller, likewise, performs equally curious experiments, but candidly avows them to be part of his programme of illusions—in short, neatly executed tricks.

Mr. Brown's so-called manifestations have an advantage over those of spiritualistic and other wonder-working mediums, in that they are reared on a small basis of actual fact. And it is just this modicum of reality which has commended them to college professors and others seeking the solution of many perplexing biological problems. At the same time, the phenomenal nature of the mind reader's apparent power has secured for him a host of adherents from the ranks of those whose peculiarly framed intellects are always ready to believe anything which rises above the level of their comprehensions to be superhuman. Mr. Brown's ability seems to consist in an exceedingly delicate sense of feeling, doubtless cultivated by long practice; he is also endowed with quick perceptive powers, likewise trained, and possesses a sensitive nervous organization. By the aid of these not at all phenomenal powers, he is enabled to detect the involuntary changes either of the pulse, or the breathing, or in the muscles in the person with whom he is in contact. It is an old and well proved fact that a person who has performed any secretive action, which is on the verge of discovery by another, will infallibly and involuntarily indicate the fact by some such bodily motion as above noted. This mental peculiarity is constantly taken advantage of in the cross examination of witnesses in courts, and by detectives in seeking to fix proof of guilt on criminals. Guilty individuals will usually betray themselves by their physical behavior; thus their actions are carefully scrutinized. Nothing is better understood than that the mind strongly affects the body: witness the actions of blushing, becoming pale, trembling, weeping, and laughing, all of which are involuntary, betraying even to the dull-est observer the sentiments of the person affected. Deaf mutes can catch the meaning of persons conversing with them by the merest shades of change in countenance; and nothing shows more clearly how the perceptive powers may in this respect be developed than the fact that the deaf mute has long since ceased the constant spelling of words with his fingers, and has substituted, in an immense number of cases, slight symbolical signs with the hands, movements of the body, and facial expressions, which fully convey the ideas. We might multiply instances, all showing that Mr. Brown's mind-reading faculty consists in a keen perceptive faculty rather than in any supernatural mental qualification. Examples of this ability exist in deaf, dumb, and blind persons, who communicate with each other by touch of fingers. But sufficient has been suggested to account for Mr. Brown's ability to find hidden articles while grasping the hand of the concealer.

As the foregoing negatives the idea of any superhuman power, it will be seen that the mind reader and the conjuror practice their arts by similar means; and on comparing them we do not hesitate to say that Mr. Heller's tricks are immeasurably more mysterious than Mr. Brown's. Eliminating the idea of jugglery altogether, it is evident that, for Mr. Heller's lady assistant to name articles touched by him at random, requires on her part a wonderful exercise of the memory, to return the exact answer called for by the peculiar form of question; and on the other hand an equally marvelous celerity of thought is necessary on the part of the conjuror to frame exactly the proper question to convey the information to his blindfolded assistant without a moment's hesitation. Robert Houdin, in his "Memoirs," explains the immense labor involved in two persons thus learning what amounts to a new language, the intricacy of which is shown from the fact that the conjuror repeatedly asks questions which convey to his assistant the ideas of phonetic syllables, which the latter links together to form the names of persons designated.

THE COST OF THE EAST RIVER BRIDGE.

It is a curious fact that, in the construction of great public works in this State, the original estimates of the architects or engineers are uniformly exceeded. The two largest structures now in progress, the State capitol at Albany and the East river bridge, are both instances of the truth of the above. The capitol is, on paper, an imposing palace, covered with ornamentation of the most elaborate and expensive description. Its original estimated cost (some \$4,000,000) has already been far exceeded, and yet the building is not half finished. Indeed, so great, it is now said, will be the additional expense that it is seriously proposed to abandon the work rather than tax the people for the necessary outlay. Regarding the East river bridge, the cost first estimated by Colonel Roebling, in 1868, was \$7,000,000, exclusive of the land. After this engineer's death, his son, Mr. W. A. Roebling, succeeded to the supervision; and he, in 1872, three years after the work was begun, revised his father's estimate