We visited Smith Strait on the 26th of August last year. Heavy ice and stormy gales prevented our penetrating far within the strait, and after being twice in jeopardy among the bergs, and three times driven out of the strait by north-east gales, we were forced to go into winter quarters on the east side of the strait, in latitude 78 degrees 17 minutes south. I expected to have reached the west coast, and to have secured a harbour near latitude 80 degrees. My plans of exploration were dependent upon dogs, of which an ample stock had been obtained in southern Greenland. Most of these animals died during the winter, and I was obliged to take the field last spring with a weak force and in an unfavourable position. I carried with me a boat mounted upon runners, for service in the open sea to the northward. After a trial of nearly a month it was found that the boat could not be transported across the strait, and I accordingly sent it back, and, with three companions and two sledges drawn by dogs, I continued northward. On the 18th of May our provisions were exhausted and we returned, having reached latiour provisions were exhausted and we recurried, having reached and tude 81 degrees, 35 minutes—a degree of Northing which I believe not to have been exceeded by any other person except Sir Edward Parry. The land which we explored is the nearest to the North Pole of any which is known. Beyond that land I believe there exists a perpetual open sea, which may be navigated. For this purpose, however, steam power is necessary.

It is my purpose to renew the attempt next year, if circumstances prove favourable; and I am still of the opinion that with steam power, a strong force of men and dogs, and a well organized system of advance depots, the North Pole can be reached. That the region about the pole should be explored, you will I think all agree. It has long enough remained a terra incognito. Speaking as one inter-ested in the advancement of science, I may say that I care not under what flag the enterprise may be conducted; whether under that of America, or England, or France, science will claim the honor of the advancement.

The expedition sailed from Boston on the 7th of July, 1860, in the schooner United States, 140 tons burthen, which had its name changed from that of Spring Hill. The plan was to proceed first to Upper Navick, in latitude 72 degrees 40 minutes, there to procure dogs and furs; to leave that port about the end of July, and, pro-ceeding through the middle ice, to reach Smith's Straits about the 15th of August. It was calculated that the first summer would be exhausted in reaching that locality, the winter setting in early in September. From that time till March, 1861, they were to remain inactive; but, on the earliest return of sunshine, sledge parties were to be formed and engaged in making explorations. The objects of the expedition were-

1. To explore further the open polar sea discovered by Dr. Kane, and to determine its limits and character.

2. To complete the survey of the northern coast of Greenland and Grinnell land.

3. To determine important questions relative to the magnetism, meteorology, natural history, and general physical features of the unexplored region north of Smith's Straits.

Mr. August Sontag, whose death we are sorry to see recorded, was an experienced voyager, a highly accomplished artist, and a distinguished man of science. He was engaged in the service of the government on the Mexican expedition, on Dr. Kane's Arctic expedition, and, we believe, on Commodore Perry's Japan expedition.

2. THE BRITISH ARCTIC EXPEDITION.

Captain Parker Snow has given a farewell luncheon to his friends on board the "Endeavour" Arctic discovery yacht, at Gravesend, previously to starting, as he hopes, on his search of the Franklin Expedition. His present plans are to leave Newcastle, where he Here his cause is being warmly taken up-to procure now is. further aid, the means at his disposal being insufficient to avoid the risk of being caught in the ice and having to winter.

About £600 has been subscribed, but not all paid in. With what has been obtained, and from his own resources, the vessel, with everything on board, is ready for the voyage, without any claim to stop her. If more funds are forthcoming to complete what is wanted, then Captain Snow will proceed : if not, he speaks of yielding to the advice of his committee and friends by waiting longer, and trying the route via Behring's Strait. But he is determined to go on if there be any possibility of his doing so, as he is most anxious not to lose this season. His route would be Baffin's Bay on the west side, which is almost sure to be open, thence to hurry on to Beechy Island. Once there, he considers his party safe, for the depot at that place is sufficient in everything useful and eatable to support one hundred men for two years. Should he get to Beechy, and the season be still open, he means to fill up stores and go on to King William's Land, there winter and try to solve the Franklin mystery. Unfortunately he has no instruments, except a few kindly furnished by Mr. Glazier, of the Royal Observatory, by Mr. Johnson, (who is

constantly adding to the comfort of the party,) and those he him-self possesses. If he gets near the magnetic pole nothing can be done by him, the Admiralty having refused everything asked for.

VI. Miscellaneous.

GOD BLESS OUR SCHOOLS.

TUNE,-God Save the Queen.

1. God bless our public schools, Their pupils, teachers bless, Be this our prayer-Where'er throughout the land, From lakes to ocean strand, Our provinces expand, O plant them there. п. God bless our comman schools-Should foes against them rise Defend them then,

Make them to honour thee, And may they ever be Safeguards of liberty, Nurseries of men. 177 God bless our public schools. The throngs of pupils bless As on they move-And as they issue forth, Let them be men of worth---The working ones of earth-Their rest above.

-[Altered from W. A. C. Converse, Esg., Toledo.

2. THE MAGIC LANTERN, ITS USES AND CONSTRUCTION.

At this season of the year there is no kind of amusement for the long winter evenings more instructive than this ingenious instrument with its appliances. It was formerly used only for exhibiting the grotesque and ridiculous, in a so called magical manner—hence its name—but is now considered of sufficient educational importance to be used in our colleges and schools to illustrate the various branches



FIG. 1. MAGIC LANTERN

which the picture is painted, fig. 2. This picture is inserted in an inverted position in the opening (b); the rays from the illuminated object then enters a sliding tube c, a, with a double convex lens at the end of it (a) and reproduces the picture on an enlarged scale on the screen (f). The sliding tube c, a, can be adjusted to the proper focus, and by this means the picture can be produced, on the screen, of an e desired magnitude. To enlarge the picture, it is only necessary to bring the lens closer to the slides and remove the

screen to a greater distance; this will, however, diminish its brightness, as the greater the surface over which the light is diffused, the

more faint in proportion, will the picture be.

The slides are usually painted with highly transparent varnish on glass; but by the aid of photography, photographic views of the most beautiful description have been prepared for the lautern; some of which can now be procured, with all the necessary apparatus, from the Depository in connection with the Educational Department.

There are two ways of exhibiting the magic lantern: in the first the lantern is placed in front of the screen; in this case the picture is seen by aid of the light which is reflected from the screen, after having been projected upon it by the lantern. Care must be taken that no

a short description of it will be given explanatory of the manner in which a few magnifying lenses can be so applied as to become an object of interest and instruction. It is a refracting optical instrument, and consists of a dark lantern with a funnel or chimney on the top, the funnel being bent for the purpose of intercepting the light in letting out the smoke; it contains a powerful Argand lamp (see en-graving Fig. 3), the light from which is reflected by the concave mirror (e) upon the convex lens (c). This further concentrates the light upon the slides on

of knowledge. The magic lantern is remarkable for the simplicity of its construction; and



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