"ut from a crystal of nitre. You will see what a striking analogy there is. The polarized beam reveals to us a similar structure.

May not this polarizing force, then, hold all things together; is there not some force in nature which, like the magnet in our experiments, shapes the crystals, edinet in our experiments, shapes the crystals, adjusts the sprays of the snowflake, and holds the mountains in its grasp.

And might we not find our molecules after all, if we get down to them, simply points of force.

The Yukon.

We clip the following from the report of the committee appointed by the British Columbia Board of Trade to enquire into the British Columnia Board σ . Yaka

The greater part of the supplies going into the Yuton District is taken via St. Michael and the Lower Yukon River, which is a long route and is only open for A short time each year. We believe that it would be in the int the interest of the miners and British Columbia merchants to have a more direct and quicker route of travel to the to this northern part of British Columbia and Northwest Territories. ning at the head of Lynn Caual, at Skagnawa Bay, which is accessible by sea-going vessels, then tollowing the up. the White Pass to the navigable waters of the Yukon, is a feasile a feasible one. be about thirty miles. The distance over this route is said to

We refer you to a more detailed report of a committee of the Board appointed to report on this subject in 1888, with ______ with which in a great degree, we concur.

White Pass, to which we have referred, we believe is much the shorter route, and although there may be the differences of opinion as to the altitude of the Pass, it is not, we understand, more than 2,600 feet above the level of the range of mounlevel of the sea. After passing over the range of moun-taine of the sea. Dr. Dawson says tains the route is comparatively easy. Dr. Dawson says of it :

The White Pass appears to offer better opportunity for making a trail or road which, if constructed, would render the entire region much more easy of access.

In order to make this route of service, we believe boats could be utilized on the lakes and upper waters of the v_{-1} the Yukon, for carrying passengers and supplies to the miners and traders of this region.

We therefore suggest that this Board urge upon the Dominion and Local Government the necessity of assist-ing to the providence of the ing towards the cost of a road over this route, by bonusing or otherwise providing for an expenditure of money in matrix the building of boats in making such a road, or aiding the building of boats becessary for opening up the route.

We would add a report given by R. G. McConnell, **B**, A, in 1891, on the exploration of the Yukon and Mackan, in 1891, on the exploration of the Yukon synopsis of Mackenzie Basins, containing an economic synopsis of this northern region :-

 G_{OLD} . As a full account of the discovery of gold and the progress and present condition of gold mining in the Upper Districts is given by Upper Liard, Cassiar and Yukon Districts is given by Dryer Liard, Cassiar and Yukon Districts - 5 Dawson in the annual report of the survey, 1887-88, Part B Part B, pp. 78-86 and 178-83, it will be unnecessary to to into the subject in detail here. "Colours" of gold becur in the bars of the Liard all the way to its mouth, but no deposits of economic value have been found beby the Devil's Portage. A number of bars were worked River the Devil's Portage and the mouth of Dease River, for several years after the discovery of gold on the r. for several years after the discovery of gold on the Liard by Messrs. McCulloch and Thibertin the year 1872, but these are now all abandoned and the records of them lost. At the present time no miners are employed on the Liard below the mouth of Dease River.

Gold in paying quantities has not been found on either the Mackenzie or the Porcupine, and the rock formations bordering these rivers do not appear to be gold-bearing.

On the Pelly-Yukon, above the boundary, and as far as the mouth of the Pelly, the limit of my examination. gold in varying quantities is of almost universal occurrence, but up to the present time active operations have been confined almost entirely to two of the tributaries. Of these, Forty-Mile Creek enters the Pelly-Yukon from the West, about forty miles above the boundary, and has its course mostly in Alaska, while Stuart River comes in from the east and flows through Canadian ferritory all the way. Gold was discovered on the Stuart in 1885, and in that and the following year the estimated vield of the various bars amounted to over \$100,000; but in 1887 it was almost deserted, owing to the discovery of coarse gold on Forty-Mile Creek and the consequent "stampede" of the miners to that stream. The gold on the Stuart is reported to be "fine" and the bars are often exhausted under present conditions in a single season's work; but as they are abandoned when the yield falls much below \$10 a day per man, it is highly probable that work on them will be resumed when improved methods of mining are introduced and the present exorbitant prices for labor and provisions are reduced. Extensive gravel benches of a more or less auriferous character border the Stuart in many places, and promise remunerative returns if worked on a large scale. Forty-Mile Creek proved a veritable bonanza to most

of the miners who reached it early in 1887, but in 1888 the returns, owing to the continued high water, were disappointing. In the former year the yield has been estimated all the way from \$75,000 to \$150,000, and was probably in the neighborhood of \$100,000. In 1888 the yield in consequence of the enforced idleness of the miners declined to less than \$20,000, most of which was obtained from the upper or Alaskan part of the stream. The number of miners employed on the stream during the two seasons varied from about 100 to 350. The gold on Forty-Mile Creek is coarser than that obtained from the Stuart, but the auriferous bars are usually of little depth, and are soon skimmed over. Some attention was paid during the season of 1888 to prospecting the gulches and gravel terraces borderng the stream. but these have not been worked to any notable extent.

The country rock bordering the Pelly-Yukon, all the way from the boundary to White River and beyond, consists of schists broken through by eruptive granites and diorites, geological conditions peculiarly favorable to the existence of metalliferous deposits. (See p. 140) They are traversed in many places along the river by promis-ing quartz veins and ledges, but these have been very little prospected as yet, the miners contenting themselves up to the present with the development of the more easily worked placer deposits.

SILVER. — A small lode of argentiferous galena crosses Forty-Mile Creek a couple of miles above its mouth. A specimen of this brought back by Mr. Ogilvie and analysed by Mr. Hoffmann yielded 38 ounces of silver to the ton,

COPPER.-Copper pyrites, in small quantities, was noticed at several points between Forty-Mile Creek and Fort Reliance. It does not occur in veins, but appears to impregnate individual layers of the schist itself. Traces of copper were also observed in the Castle Mountain dolomites at the base of the Nahanni Butte section.

FIBROUS SERPENTINE.-Some of the serpentines in the vicinity of Forty-Mile Creek occasionally assume a fibrous structure and pass into a picrolite or coarse asbestos. A small specimen of good serpentine asbestos has also been brought from the Stuart River. (See Annual Report Geol. Survey, 1887-88, p.27b.)