

have had no manual training. The St. Louis school has never received a dollar from either the city or the State, and, as Professor Woodward phrased it, "the director is gratified by the thought, that, in spite of its many shortcomings, the school has served to demonstrate the entire feasibility of incorporating intellectual and manual training in such a way that each is the gainer thereby, and that it has correctly read the public demand for a valuable mental discipline which shall at the same time insure the acquirement of knowledge and skill of intrinsic worth."

#### THE INCREASE OF STATE INTERFERENCE IN THE UNITED STATES.—I.

THE most casual newspaper-reader and observer of legislation must have had his attention attracted to a growing tendency in our legislation toward the regulation of private and personal concerns. We are aware, of course, that the term 'private and personal concerns' may be said to be more or less indefinite; but it is nevertheless true, that, as used by the majority of intelligent people, its content is, in a general way, understood and agreed to. It is in this generally accepted sense that we use it here.

A few weeks ago we editorially called the attention of the readers of *Science* to an article in which Dr. Albert Shaw of Minneapolis illustrated the tendency of which we speak, from recent legislation in Minnesota. Dr. Shaw gave a digest or summary of the session-laws of 1885 in his State, and pointed out not only the relatively large number of laws that may be put under the head of 'State interference,' but the great variety of subjects with which they attempted to deal.

It is our opinion that the majority of the American people are not aware of this tendency in legislation, and that many of those who are informed about it do not appreciate its real character, nor the result to which it logically leads. To arouse discussion on these points, as well as to secure more accurate data than have yet been laid before the general public, we have addressed letters to various students of legislation and political science in all parts of the country. In our correspondence we have presented four questions, as follows: 1. How far does the legislation in your State show a tendency similar to that observed in Minnesota? 2. In what new particulars is State interference being manifested? 3. Do you believe such interference to be advisable? 4. If not, what measures would you adopt to check it? It is the answers to these questions which we now desire to lay before our readers. As was to be expected, the different correspondents differ widely, both in standpoint and in method. In a few cases correspondents from the same State interpret the tendency of legislation in that State differently. The one considers it in the line of State interference, the other does not so view it. In a small number of cases the writers have considered the questions as affording them an opportunity to make an attack on protection, prohibition, or some similar question. These answers, involving as they do a begging of the question, are of no value for our discussion. But, setting aside a few such instances as these, the replies are of very great interest and value, and are of practical unanimity in stating that State interference is becoming more general in all parts of the country, and along pretty much the same lines. Granger legislation pure and simple, anti-co-operation legislation in general, and labor legislation, are the classes under which the vast majority of the laws indicating State interference may be brought. The question at issue is, we take it, twofold, involving, first, the conception of the powers and duties of the State; and, second, the application and use of these powers and duties. This has not always been comprehended by our correspondents. And, furthermore, for others than professed students of economics, it will require some thinking and investigation in order to take a position on the questions involved which shall be worth any thing. As Pres. Francis A. Walker writes, "For an out-and-out *laissez-faire* it is easy to dash off some highly objurgatory remarks on the subject of State interference; but for one who believes that the State has important functions, social and industrial, as well as political, it would require much time and thought to give a proper expression of one's views as to where State interference should begin, and where it should end."

Although the expressions of opinion which we have received come from all parts of the country, it will conduce to clearness if we discuss them by locality. For that reason we begin with the New England States.

In Maine it seems that the tendency referred to is quite noticeable, though it has only become so recently. Mr. F. E. Manson of the *Kennebec Journal*, Augusta, writes, that, until the Legislature of 1886 passed slight restrictive measures, there were no laws which regulated the formation of private and corporate concerns. Prof. A. E. Rogers of the State College at Orono designates three particular directions in which State interference is being manifested: (a) the increasing stringency of sumptuary laws, (b) the tendency to diffuse education among the masses, and (c) the increasing tendency to protect individual interests against corporate power. Professor Rogers is emphatically in favor of this development of State interference. He writes, "The government exists for the benefit of the people, and whatever, *all things considered*, conduces to their benefit, is in the province of the government. In the proposing and determining of legislation is the test of statesmanship. No fixed rule can be laid down as to what measures may or may not be undertaken." And then, with a bluntness that sounds like Patrick Henry, the professor defiantly adds, "If this smacks of socialism, so does the very organization of man into society, so does government itself."

From Massachusetts we have received a large number of replies; and it is extremely interesting to compare the views they take as to whether legislative interference is extending or not. Mr. Thomas Wentworth Higginson, himself a legislator as recently as 1881, does not believe that the tendency, while observable, has reached a dangerous point. He believes that the town organizations, with their jealousy of all centralization which curtails their powers, will effectually check State interference in Massachusetts. Mr. Higginson instances educational supervision in support of this position, and states that the strong feeling in the towns against State interference has thus far defeated all attempts to secure a more efficient supervision of the schools. Mr. Higginson believes that this local feeling is similar in force and character throughout New England, and attributes the increase of legislative interference in the Western States to the absence of the town organization, with its attendant local feeling.

Prof. John B. Clark of Smith College finds the tendency to have been stronger last year than this, and attributes the re-action to an effort on the part of conservative men to keep the growth of State interference within bounds. Professor Clark instances an arbitration bill (by which either party in a labor-dispute may secure a decision), an employers' liability bill (which makes employers responsible for the acts of their employees resulting in injury to other employees, in cases in which the common law would exempt them on the 'fellow-servant' principle), and a bill fixing uniform times for meal-hours in the case of factory-employees, as examples of the most recent manifestations of State interference. Professor Taussig of Harvard adds to this list certain legislation regarding food-adulteration, but fails to find any distinct tendency toward an increase of legislative interference, save in the case of labor-troubles. Professor Perry of Williams College is of the opinion that Massachusetts is, on the whole, true to "that sound political maxim, 'That government is best which governs least.'" He is inclined to believe that the tendency toward interference is for the most part exhausted in the introduction and push of bills of that general character, and exercises but slight influence on the positive enactments. Professor Perry defines State interference as "nothing but the interference of certain individuals for their own profit with the rights and property of their fellow-citizens in the alleged *name* of the State." We shall refer again to this definition, which seems to us to reach the kernel of the whole matter.

Another correspondent, Mr. Joshua H. Millett of Boston, finds that Massachusetts legislation shows a very great increase in the number and variety of measures that may be styled 'interfering.' On the statute-book he finds laws very similar to those cited from Minnesota. "Laws treat of almost every article of consumption and use," writes Mr. Millett. Among the articles legislated about are butter, cheese, fish, bread, vinegar, hops, leather, ashes, milk, oil, gas, lumber, fertilizers, fruit, hay, marble, nails, and sewing-

thread. The State gives bounties to agricultural societies. The practice is extending of bringing all places of resort and amusement under the control of the State. In 1885 an act was passed, permitting municipalities to control skating-rinks, in order that the attendance might be regulated irrespective of sex and age. A recent law prohibits minors under the age of eighteen from working more than sixty hours a week in mercantile establishments. A weekly-payment law was passed in 1886.

Dr. Davis R. Dewey of the Massachusetts Institute of Technology finds that "the tendency of the statutes toward State interference is not so marked in Massachusetts as in Minnesota." From 1866 on, each year has seen an extension of legislation in the direction of control over employers.

Dr. E. W. Bemis of Springfield writes that "there has been a steady increase of State action during the past ten years in Massachusetts. This increase has been chiefly in matters of monopoly regulation, sanitation, education, and labor legislation. There has been no marked interference with the ordinary business or domestic life of the people, but the State has been called upon to control for the public good, large and otherwise irresponsible corporate bodies, and to protect the weak and ignorant." Dr. Bemis relates a case in which the New Haven and Northampton Railroad objected to the advice of the railroad commission to establish a depot in the town of Whately, Mass., through which the road ran. The commission thereupon ordered the depot built, and said, "The mistake of the railroad-managers in such cases is in supposing that the interests of the stockholders are paramount, and that the earning of dividends is the sole object to be sought in operating a road. Our supreme court has said more than once that a railroad-corporation is erected mainly for the public benefit, and only incidentally for its own profit. And because directors are liable to take a wrong view of their duties, the State reserves full control, and delegates to its agents the power of supervising the operation of these corporations." The State has a savings-bank commission with similar powers and duties. In 1885 a gas commission was organized, the function of which is, upon the complaint of the mayor of a city or the selectmen of a town in which a gas company is located, or of twenty customers of such a company, relative to the quality or price of the gas, to give a public hearing, and order such reduction in price or improvement in quality as seems best. And in Worcester this provision has been applied, and a reduction in price from two dollars and a quarter to a dollar and a half a thousand cubic feet was ordered by the commission. Thus, at one blow, the gas company's income was reduced by more than fifty-six thousand dollars per year. Dr. Bemis further states that more than four-fifths of the area, and probably two-thirds of the population, of the State, are under local prohibition.

Dr. Bemis sees no occasion for alarm in the progress of this tendency, because it has only passed into practice in "such cases as the condition of the times seems to demand."

[To be continued.]

#### THE EXPLORATION OF ARCTIC AMERICA.

THE map accompanying the present number of *Science* shows the present state of our knowledge of north-eastern Arctic America. During the last ten years very little has been added to our knowledge of this vast territory as compared to the period from 1845 to 1870. It was during that time that the search for Franklin resulted in the thorough exploration of the Arctic American Archipelago, in the discovery of the waters north of Smith Sound, and the discovery of the unknown parts of the coast of the continent. Though English expeditions did the greatest part of this work, we Americans may boast of names and discoveries not inferior to theirs: de Haven, Kane, Hayes, Hall, are names that will always be remembered in the history of arctic exploration. The names of American patrons of science, such as Grinnell's, are justly given to lands and seas discovered by the expeditions they had sent out.

After the period of lively activity in the Arctic regions, a relapse ensued, and the noteworthy expeditions since 1870 are very few. The German expedition to East Greenland explored part of north-eastern Greenland, and discovered the large fiords of that coast. It is only since last year that the important results of

Holm's expedition in 1884-85, on the east coast of Greenland, are known. He discovered the ragged coast of Christian IX. Land. Danish explorers are continually adding to our knowledge of West Greenland. Nordenskiöld's remarkable journey into the interior of Greenland was made in 1883. However, it is in the Smith Sound region that the most important additions to our knowledge have been made. Every new expedition pushed the limit of the unknown area farther north. Bessels' tide-observations made on the 'Polaris' expedition first established the insularity of Greenland by showing that the Atlantic tide enters Robeson Channel from the north. The important explorations of the expeditions of Nares and Greely need hardly be mentioned. The explorations in the other parts of Arctic America are of no great importance. Hall's observations from 1864 to 1869, which were published only lately, gave corrections for several parts of the American coast; Schwatka's bold march to King William Land added a few details to that part of the map. A few scattered surveys by whalers, principally those of the enterprising Captain Spicer of New London in Fox Basin and Hudson Strait, are embodied in our map. Last we have to mention the German surveys on the east coast of Baffin Land.

How little is this as compared to the results of former years! And how much is still to be done! On looking at our map, it might seem as though the coasts and part of the interior were well known, but all maps are deceptive in this respect. In many instances we do not know the sources from which the information contained in the map was derived, and consequently are unable to test their accuracy; but wherever this was done, the maps proved to be utterly unreliable. A few weeks ago we mentioned the journey of Missionary Peck from Richmond Gulf on the west coast of Labrador, to Ungava Bay, by way of Seal Lake and Freshwater Lake. He reported that no such rivers and lakes exist as shown on our maps; yet we have to do the best we can, and reproduce what former maps contain, as it comes nearest to the real configuration of the land. Colonel Gilder informs us that the coast near Chesterfield Inlet is not at all similar to the map, but we have no means of correcting it. Is it necessary to point out a few other inaccuracies of the map? We do not know the configuration of Ungava Bay and the north-western half of Labrador; Wager River, on the west coast of Hudson Bay, and the north coast of Hudson Strait, are practically unknown; Eclipse Sound, on the west coast of Baffin Bay, is drawn from a rough sketch, without any actual survey, and so is Admiralty Inlet; and the vast territories in the interior of the islands and continent have not yet been visited by any scientific man. In short, there is not a square inch on this map on which important discoveries might not be made.

However, those are 'polar regions;' and it seems that, after the sad experiences of de Long's and Greely's expeditions, the mere word 'polar' is sufficient to suppress all interest in such explorations. The ideas conveyed by the word are of ships crushed by ice, and a party starving on an ice-field or devoured by ferocious polar bears. But this is a gross misconception of what polar exploration is and ought to be. Its object is the thorough exploration of the Arctic region and of all its phenomena. In order to attain this object, it is not necessary to organize adventurous expeditions the sole object of which is to push north and gain a few miles upon predecessors. The exploration of the polar regions is not a work for the bold and daring adventurer: it is the task of the careful scientist, who knows thoroughly what science will profit by every mile gained and by the study of all the phenomena of regions often passed by ships or never visited by man.

We will draw attention to some geographical problems which offer themselves in the vast area shown in our map, and which can be solved without incurring great expense or great danger. The problem which is of greatest importance is the exploration of the islands west of Smith Sound. There are two starting-points for such expeditions,—Hayes Sound and Jones Sound. Eskimo reports lead us to suppose that Hayes Sound forms a strait leading to the western ocean; but, even if this be not the case, Greely's expedition across the isthmus between Archer Fiord and Greely Fiord shows that it would not be difficult to reach the west coast. Jones Sound is easier of access. It has only been visited twice,—by Belcher and Ingfield on a short trip,—and no serious attempt has been made to explore its western continuation. From Eskimo