especially since no such legislation can be retroactive so as to compensate them for past losses ?

As to American literature, I may repeat, that the constitutional right of Congress to provide an international copyright with England is based on the constitutional clause, when interpreted to mean that Congress has the right, not to encourage authors quoad authors, but to encourage the growth of literature and the arts per se; and this (though I have them not by me) I understood to be the gist of the arguments of my esteemed friend, E. L. Andrews, Esq., before a committee from one of the houses of Congress, and of Mr. Thorvald Solberg in a late letter to Science. I rather doubt, myself, if the framers of the Constitution were thinking, at that precise date, of future flights in literature and art, instead of the new born nation for which they were drafting organic laws, or if the presumption is not that they were thinking of the latter; but, at any rate, I am of opinion that the absence of an international copyright with England is rather more of an incentive to emulation on the part of our American authors than its presence could possibly be. Just as the highest standard produces the highest scholarship, so, it seems to me, the fact that, other things being equal, the American publisher prefers 'to print the Englishman's work rather than the American's, is a tremendous inducement to the American to make things unequal in his own favor. Said a writer of novels, an American, to me the other evening, "The public buy novels, - not your novels, nor my novels, but novels, --- and I ought not to be obliged to compete with stolen goods. - But if that be the case," said I, "it appears that you are not competing with stolen goods necessarily, but with your brother novel-writers. Stolen goods are the accident, no doubt, of your trade, but not to a larger proportion than of any other trade. Your remedy, it seems to me, is not to petition for international copyright, but to give your goods such a character and reputation that consumers will take none but yours. If you assume a commercial standpoint, you must take the consequences of it.'

However, in dealing with the guild of authorship, we must never forget that all the members, indiscriminately, of that guild, deserve our grateful recognition; and this is equally, I think, the public sentiment of this continent; and besides, as to any of the craft, alien or native, in these questions one should always remember that authors and dealers in literary property do not exactly stand upon a bread-and-butter basis. As to the author, he is a gentleman who has deliberately selected the worst-paid and least-thanked of the professions, — a profession which not only attracts the minimum of commercial attention, but practically unfits him for ever leaving its walks for any other, — and therefore he should be treated, if not with that benign munificence which the law extends to sailors and infants, at least with the consideration and self-abnegation of his fellow-men.

So far as the question of an international copyright with England goes, I personally have never abandoned my belief in its righteousness. However doubtful of the constitutional powers of Congress to enact one by special statute, I am able to see no reason why the present statute cannot be amended (say, by substitution of the word 'person' for the words 'citizen of the United States') so as to practically enact one: or treaty made with Great Britain, which, under the treaty-making power, might shield itself from any judicial question whatever. As to an international copyright with France, Germany, or other continental nation, it is needless to add, the considerations I have suggested above do not in any wise apply.

APPLETON MORGAN.

THE INCREASE OF STATE INTERFERENCE IN THE UNITED STATES. — III.

WE have now before us what is said in a general way by representative men among the economists and students of political science with respect to the character of recent legislation, so far as it bears upon the question as to the increase of State interference. We have sufficient data to justify the opinion that laws having a tendency to interference are on the increase, and that this increase is pretty general throughout the country. It remains to discuss the views entertained by our correspondents as to the advisability of such legislation. These views are extremely diverse, and show very clearly the absence of any organized body of widely influential economic thought in this country. Sixteen per cent of our correspondents are unreservedly in favor of the unlimited extension of State control: they are therefore logically State socialists. We believe, however, that this proportion is far larger than that which obtains among either professed economists or the people at large. Twenty-seven per cent of our correspondents are in a general way favorable to the extension of State control, but would guard such extension carefully. Twenty-four per cent view State control with disfavor as a principle, but would admit it in certain cases. Thirty per cent are unreservedly, some of them violently, opposed to Statecontrol, and express themselves with much directness and force. A comparatively small number rest their opposition on laissez-faire as an economic doctrine, the larger number assigning other reasons. Three per cent express no opinion, and are therefore classed as non-committal.

In noticing the able pamphlet of Prof. Henry C. Adams, 'The Relation of the State to Industrial Action' (*Science*, ix. No. 222), we pointed out that he lays down three guiding principles for the regulation of State interference. It will be well to recall these principles, and keep them in mind for comparison with what is said on the subject by others. The principles referred to were, (I) the State may determine the plane of competitive action, (2) the State may realize for society the benefits of monopoly, (3) social harmony may be restored by extending the duties of the State.

Professor Cooper of Carleton College, Minnesota, says, "I believe the State should interfere to control powerful monopolies, but this power cannot be wisely used by such men as are chosen to our State Legislatures."

Frank R. Morrisey of the Omaha (Neb.) *Herald* strongly opposes State interference. He would check it by "the education of public sentiment to the fallibility of majorities through the columns of the press, the pulpit and the rostrum, infusing a broader knowledge of the privileges of personal liberty, and impressing upon the citizen the necessity for the consideration of every other citizen's opinions."

William Alvord of San Francisco believes in amendments to the State constitutions, forbidding the enactment of local or special laws. He says, that, since the adoption of the new California constitution, the bound volumes of session-laws have decreased from over 1,000 pages to 270 pages or thereabouts.

Prof. Jesse Macy despairs of any reform so long as thinkers and teachers beat the air, and keep out of speaking-distance with the people who are in governmental difficulties.

Prof. Henry C. Adams thinks that the increasing attention now being devoted to political science will in time produce less unsatisfactory legislation.

C. Caverno, Esq., of Lombard, Ill., is very optimistic. He finds in the increasing interference only renewed adaptation to the social environment. "In my judgment," he tells us, "our legislation is predominantly wholesome: the work of man rarely appears to so good advantage as therein."

Herbert L. Osgood of Brooklyn, N.Y., says, "Take the world over, political theories at the present time tend strongly toward the advocacy of more State interference. This is doubtless in response to a real need. The statutes of this nation, as well as those of Europe, will probably yield to this impulse to a certain extent; but theories always far outrun practice. The Republic does not necessarily lead toward individual freedom, but the spirit of private enterprise is too strongly developed in this country to yield to a paternal government. I believe the restrictions upon the freedom of the individual coming from public opinion and social custom are in this country more dangerous than those to be feared from the laws."

Assemblyman E. H. Crosby of New York City believes that the increase of legislative interference is the result of a popular demand for it. This demand, to be intelligent, must be directed by sound political science, and the dissemination of this is the need of the hour.

Morris F. Tyler of Connecticut is a representative of those who think that unlimited *laissez-faire* will work a cure in time. Prof. A. T. Hadley does not believe it worth while to try to check it, but would let extremists pass such laws as they please. These could not be enforced, and would either be repealed or become a. dead letter. Prof. John B. Clark of Smith College would trust to political education. "The specific point," he says, "in which intelligence can do the most immediate good, is in the labor-organizations from which the political pressure proceeds."

The Chicago Tribune sends us the following : "The Tribune holds that restrictive legislation is not only advisable, but necessary, though admitting it may be carried too far, and has often been overdone in the past. You have doubtless noticed that the relative breadth of restrictive legislation varies with the development of civilization in a community. At first all is arbitrary, each offence being treated on what the judge or judges (maybe dictator or plebiscite) regard as the merits of the individual case, without regard to precedent. As the community grows, the tendency is to swing towards the other extreme, and the resulting over-legislation is more slowly corrected. Bad laws are repealed, good ones consolidated, and special legislation forbidden for the future by constitutional enactment. These three phases may be said to be approximately represented by the mining-camp in this country, the frontier State, and the older State. Illinois is a senior of Minnesota in the family of States, and may therefore be expected to be less paternal in legislation. And there is reason to believe that a careful comparison of the two would show this to be the fact. Undoubtedly the best form of government, and we may even say the ideal one, is that in which an appeal to the common law would suffice as a rule of action in all courts, and its interpretation be found adequate to the punishment of wrong-doing by any member of the community, however prominent he may be. But no State in the Union has yet reached the stage where this could be depended upon; and, till this has been attained by a process of slow growth, it seems to be necessary to resort to some kind of special legislation to provide against new forms of wrong doing which every now and then crop out in the race between conscientiousness and rascality."

Prof. E. J. James prefers to secure better legislation by improving the grade of legislators. He would not "restrict the power to Legislatures to do much good, for fear they may do some harm," by constitutional amendments.

The replies mentioned above are fairly typical of the divergent views presented. Had space permitted, we should have been glad to produce more of our replies in full. But our end is gained if we shall have succeeded in directing thoughtful attention to the tendency developing among us. As Dr. Shaw says in his original article, we think we are proceeding on one economic theory, but our actual legislation is in direct opposition to that theory. We are not asking for a restoration of laissez-faire; but we should like to know whether this perpetual running to the Legislature for purely private enactments meets with the approval of the thinking men of the country. We do not believe that it does. We believe, with Professor Perry of Williams College, that interference results from the attempts, often successful, of individuals to accomplish, in the name of the State, their own personal ambitions and desires. We believe that when the people at large realize the extent to which paternalism in legislation has developed, they will declare themselves with no uncertain sound as in favor of the fundamental American principle of individual liberty and individual responsibility. They will just as emphatically refuse to permit the State's power to be prostituted to personal ends.

HEALTH MATTERS. Preventive Medicine.

IN an address on the recent advances in preventive medicine, delivered at the thirty-eighth annual meeting of the American Medical Association, Dr. G. H. Rohé stated that the danger of an invasion of this country by cholera was greater than it had been at any time during the past three years. The United States are threatened from three sources : first, from Europe, by way of the Atlantic Ocean ; second from Japan, by way of the Pacific ; and, third, from the west coast of South America, by way of the Pacific, or by way of Mexico and our southern border. The Isthmus of Panama and the South Atlantic lines of transportation may also act as gateways to the infection.

In this address, Dr. Rohé refers to the researches of Shakspeare, Koch, and Pettenkofer into the relations between cholera and its

bacillus or spirillum. He also alludes to the claims of Freire of Brazil, and Carmona of Mexico, concerning protective inoculations against yellow-fever, and to the fact that these claims are now being investigated by Dr. Sternberg, under the authority of the president. A brief history is given of the cases of scarlet-fever which have occurred in England, apparently having their origin in milk from diseased cows. We have already mentioned these cases and the able investigation of them by Mr. W. H. Power of the English local government board. The subjects of tuberculosis and typhoidfever also receive attention.

Decided advances have been made in the disposal of the refuse of cities. The cremation of garbage has been carried out at Montreal, Canada, and at Wheeling, W.Va. The irrigation system of sewage-disposal has been greatly extended in Germany. In Berlin it has given great satisfaction, the sewage of 900,000 people being carried to irrigation-fields, and the water which drains off being submitted to chemical examination for evidences of pollution, which were discovered but once during an entire year. The objection that this system of sewage-treatment is not applicable in cold climates is invalid, as is shown by the results in Pullman, Ill., and in Dantzig, Germany. Birmingham, England, with a population of 600,000, has adopted the irrigation system, and the income realized during 1885 from the sale of stock and produce from the sewagefarm amounted to over \$100,000.

During the past year the poisonous effects of tyrotoxicon, discovered by Professor Vaughan, have been witnessed repeatedly in persons who have taken milk and ice-cream. Professor Vaughan has made the suggestion that this ptomaine may be the active cause of cholera-infantum. The question of public baths is treated very fully in the address. Public, like private, bathing institutions must make provision for individual baths. Large pools, in which many persons bathe at once, fail to answer the requirements of sanitary science or of public decency. A French army surgeon, Duval, has overcome this difficulty, and now both the French and German soldiers have proper facilities for bathing. The latter are required to bathe every week, the government furnishing the bathroom, warm water, soap, and towels. In our army and navy no steps have been taken to introduce this reform, although Dr. Billings has shown its feasibility. Dr. Lassar of Berlin has demonstrated the practicability of separate bath-rooms in connection with public bathing, and has been urging the extension of the military system to the civil population, so that every German may have his weekly bath. He gives excellent illustrations of the practical benefits to be derived from the adoption of such a system. At the white-lead works in Ehrenfeld, the eighty employees are required to bathe weekly, the facilities being furnished by the proprietor. In the first year, 1884, the sickness was reduced twenty per cent, and in 1885 it was reduced still lower, fifty per cent. In certain dye-works in Berlin, ten rooms, containing shower-baths, have been provided for workmen and their families, and for all who desire to use them. In Göttingen, with a population of 21,000, of which number 3,000 are children who attend the public schools, baths are fitted up in the basement of one of the school-houses. A class of fifty can bathe in an hour. Each child has the opportunity of bathing once in two weeks, and seventy-five per cent of the children avail themselves of it. The authorities and teachers are unanimous upon the point that the system is of great benefit to the children, not only from its direct sanitary advantage, but from the habits of cleanliness formed, to which they are likely to adhere through life. The only cities in the United States having public baths are, Boston, with 17; New York, 15; Philadelphia, 5; Brooklyn, 3; Cleveland and Hartford, each I; and Buffalo, the number not given. In New York, 3,431,086 persons bathed from June to October in 1883; during the same time in Boston, 959,765; and in Brooklyn, 225,885. In eighteen cities where there are no public baths, only about twenty-three per cent of the residences are supplied with bath-tubs.

Dr. Rohé concludes his address with a statement of some of the results of the application of sanitary measures, quoting the statistics of Dr. Baker in Michigan, and Dr. Ogle in Great Britain. The address is an admirable *résumé* of what has been done in the realm of preventive medicine, and no one can read it without being impressed with the great strides which have recently been made in this field of research.