

SCIENCE:

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CONTENTS:

AN ELECTRIC SNOW-PLOUGH.....	155	BOOK-REVIEWS.	
THE HALE PATENT PAVEMENT.....	155	Emigration and Immigration....	160
MAJOR POWELL'S ADDRESS TO THE		LETTERS TO THE EDITOR.	
MINING ENGINEERS.....	156	The Cause of Rain	
ELECTRIC WELDING.....	157	Frank A. Velschow	160
HEALTH MATTERS.		A New Meteorite	H. L. Preston 167
Consumption in Hayti.....	158	INDUSTRIAL NOTES.	
The Hour at which Death Occurs	158	A Novel Electric Bell.....	167
Putrefaction at Great Depths in		The Robes Improved Shaft-Coup-	
the Sea.....	158	ling.....	168
NOTES AND NEWS.....	159		

BOOK-REVIEWS.

Emigration and Immigration. By RICHMOND M. SMITH. New York. Scribner. 12°.

THE New England States were settled by a set of persons with very fixed ideas as to the proper way of conducting Church and State, and those who came later from the mother country to settle found that they must follow exactly in the footsteps of those already there, or be subject to abuse and even most cruel persecution. Those early puritans must have looked on the later comers as immigrants among themselves who had colonized the land.

We are now experiencing a somewhat similar condition of affairs. Our author, with others, extends the colonization period to the time of the Revolution, or, as few new-comers came to the country from 1776 to 1820, even to this latter date. Those who possessed the country did not by any means agree among themselves as to what sort of a country, politically and socially, it should be; but still a very successful democracy was established, with a fairly uniform conception among the people of what was best for them.

But since 1820, owing to the existence here of vast tracts of unoccupied farming-land, and to the development of methods of transportation with an accompanying enormous reduction in the cost, millions of people have left Europe to make new homes for themselves in this country. The result is, that, as Richmond Smith puts it, nearly the half of our population is made up of persons either of foreign birth or whose ancestors came to this country since 1820.

"What is to be the effect on our institutions?" is the query to which this book on emigration and immigration is written.

The need of such a book is obvious when one considers the paucity of available literature on the subject. There are, of course, numerous magazine and review articles, and numberless newspaper squibs. The last are buried hopelessly, and the former are by no means easily accessible even in the largest libraries. Every one knows what repulsive volumes are the government reports on any subject, published, as they mostly are, without any intelligent editing. So it happens that Richmond Smith has given us a most convenient and needed summary of the facts on the subject under discussion.

That the question of government regulation of immigration has been a burning one, goes without saying. The immigrants come here to earn a living, and a better living, as they believe, than they have had in their old homes. But in going to work, on arrival, Tom or Jerry appears to displace some one already in possession of a good job: so over and over again a cry has gone up from the laboring classes for a checking of this inflow of rival workers.

In the main, the immigrants come because their husbands, families, or friends are already here; and no reason appears why this process should not continue, so long as any induce-

ment exists for them to come. This is what is happening as the result of affairs as they have come naturally to exist. Now, our author is one of that new school of economists who think that the haphazard evolution of mankind should not be allowed to go on longer unguided. This school would have all things human guided, and, as the State, whatever that may be, is the only body strong enough to enforce its guidance, guided by the State. The State is doubtless wiser than it once was, but then it has more difficult problems to deal with as it grows more developed. But how is that acme of State wisdom to come that shall make it possible for the State to deal intelligently with the immigration of a million of people to this country in a year? How is it likely that the State can wisely do more than say that paupers and members of the other defective classes shall not come, and possibly that the bringing in under contract of bands of laborers is no longer necessary?

That this influx of new population is going to have an effect in changing our institutions is doubtless true; and let us hope that the remnants of some of the institutions of our revered pilgrim fathers may be swept away, now that we no longer believe the devil is lurking behind every wood-pile, as did our ancestors.

Let us see that the immigrants coming are sound in body and mind, that they are brought here in human fashion, and that they are not fleeced after their arrival; but let us not dread the effect on the institutions of the future of sane men living in a free country.

LETTERS TO THE EDITOR.

. Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

The editor will be glad to publish any queries consonant with the character of the journal.

On request, twenty copies of the number containing his communication will be furnished free to any correspondent.

The Cause of Rain.¹

In a paper entitled "On the Cause of Trade-Winds," which I recently had the honor of reading before the society, I gave my reasons for assuming that the actuality which lies behind the really abstract term "a centre of high pressure" is a body of unsaturated or dry surface-air, or what may be called an air-cushion. I now propose to continue this train of thought by dealing in a similar way with low pressures, or cyclones, thereby trying, if possible, to arrive at a definite conclusion as to the actual cause of rain; rain being the most prominent feature of cyclones, or low pressures.

The difficulty in approaching this subject lies perhaps herein, that, as Mr. Scott says in his "Elementary Meteorology," 1887, "almost every one imagines himself a born meteorologist," and therefore in all likelihood almost every one of my present audience has formed for himself a more or less definite opinion of the cause of such an every-day occurrence as rain. To shake this faith a little, and to show you that we here really stand before a problem which has not as yet been solved, I may commence by quoting what a man of Mr. Scott's experience says. "We must admit," says he, "that the study of weather has made next to no progress at all in gaining an insight into the agencies which are at work in producing the various phases of weather;" and, "unless this be secured by careful and long-continued attention to a few simple and obvious principles, the labor bestowed on the most complete mathematical discussion of the results will be thrown away."

It is indeed a curious fact that the more pains meteorologists have of late years taken in trying to bring the accumulated facts of observations to agree with theory, the farther they seem to have gotten away from their goal. They may not all admit this, but it is a sign of a wise man that he admits when he knows nothing; and, as we have just seen, Mr. Scott for one is evidently fully aware of the defects of his science, which he declares can hardly be called a science as yet.

To make you a little familiar with the difficulties we have to

¹ The substance of this letter was read before the American Society of Civil Engineers, Feb. 19, 1890.