

## THE FIRST HYDRAULIC CRANE.

Sir Wemyss Reid, in the *Nineteenth Century*, gives some reminiscences of Newcastle-on-Tyne. One of the most interesting refers to the origin of the hydraulic crane. "As a youth," he says, "I remember a plain house in Westgate street, upon the doors of which was a worn brass plate bearing the words, 'Mr. Armstrong, Solicitor.' The Mr. Armstrong of 40 years ago was an eminently respectable member of his profession. Some good people, it is true, shook their heads when they heard that instead of attending to conveyances, and writs and mortgages, he had taken to dabbling in mechanics. Not that way does fortune lie in the profession of law. But one day I was taken as a boy to see a remarkable new toy—it seemed nothing more—that had been placed upon the Quay-side at Newcastle, where a few small steamers and Dutch merchantmen were in the habit of coming with cargo. It looked like a metal box with some curious handles, not unlike water-taps, upon the lid. A good-natured workman turned one of these handles, and lo! as he did so, a great crane hard by rattled its chain, and slowly, but surely, swung a heavy load into the air. It was like magic. 'Now try it yourself,' said the man, as he stopped the movement of the crane. Timidly I moved the handle, and straightway the miracle was repeated. At the touch of a child, the heavy load was at once borne upwards. 'It's all dunne by watter,' said the man, 'and it's Armstrong, the solicitor, in Westgate street that's invented it.' That was the first hydraulic crane. 'Mr. Armstrong, solicitor,' had found his true calling in life. He still kept up the practice of his profession, but he bought a small bit of ground by the side of the Tyne, away from the town, on the Scotswood road, and there he raised a modest building, within which the manufacture of his new hydraulic machinery was undertaken. From that humble beginning of more than forty years ago has sprung the vast Elswick establishment, which knows only one rival in Europe. Fifteen thousand workmen are busy from day to day at furnace, forge and lathe. Of course the place had begun to make great strides forward before I left Newcastle in 1862. The famous rifled gun had been invented and was becoming almost as important an article of manufacture as the hydraulic cranes and rams. But since then the development of the establishment has been almost appalling, and I could not recognize the scene once so familiar. It is 'Mr. Armstrong, solicitor,' now Lord Armstrong, who has given the impetus to the industrial progress of the Tyne."

## EGYPTIAN COTTON.

The following is the resume of reports on the condition of the Egyptian cotton crop for August received by the Alexandria General Produce Association: "The heat has continued intense throughout the month. Irrigation was sufficient or abundant, according to localities. In no place did worms appear. In some districts there were fogs, very few in number and light in character, which occasioned no appreciable damage. Thanks to this combination of favorable circumstances, the cotton plants have prospered well, and show an excellent appearance. With few exceptions, all the backwardness previously mentioned has disappeared. It is estimated that the first picking will commence in the second half of September in Lower Egypt, that is to say, about the same time as last year, and a larger crop is expected if nothing harmful happens in the future. In Upper Egypt and Fayoum the crop, which commenced some time back, is now well advanced. It is larger than that of last year."

## THE TYRANNY OF THE UNION.

From The Railway Review.

A trade union paper recently made use of the following sentence, than which nothing could be more true: "We pity the man who has a collar around his neck, a chain fastened to that, and some boss to lead him wherever he goes." In the journal in question the sentence was employed for the purpose of persuading men to break away from their allegiance to their employers and unite with a particular union for which the paper in question stood. If any one can point out a slavery more servile or an influence more autocratic than attaches to the ordinary labor organization, it would be

interesting to know what it is. As too often conducted, these two organizations assume to control the action their members despite their will, and to a degree that is unheard of in any line of employment; with the very material difference that in the one case the men are forced to contribute to the maintenance of their rulers, while in the other they receive compensation for their service. In the article referred to, an appeal is made "to be a man; exercise the rights of a man, and stand by your convictions." The same journal, not a great while ago, was denouncing men in the severest terms because they chose to do this very thing. The convictions of these men led them away from the labor organizations, and no epithets were too vile for the use of the journal in question in referring to them.

## HORSELESS FIRE ENGINES.

From The Boston Transcript.

The statement has been made that the head of the Boston Fire Department proposes to add to the equipment of the service two self-propelling steam fire engines. The idea is not a new one, even in this city. A number of years ago the department had in service such a piece of apparatus. Its mechanical record was fairly good, but as it frightened all the horses on the streets through which it passed, it was relegated to a private corner long before it was worn out, and it has never been in service since, at least in this city. This was before the time of horseless cars, and it is possible that the familiarity of our equine population with the electric cars may have prepared their minds for a philosophical reception of the self-propelled engine. Still, horses do not take kindly to the steam roller, and if they should see it plunging madly along our congested streets at a three-minute gait, belching smoke and flame, their fears would not be likely to be much allayed. The self-propeller on its travels bears a close resemblance to the steam roller. The only city that uses this style of engine to any considerable extent in the East is Hartford, Conn. Her Jumbo is well known to fire departments all over the country. It is nearly twice the weight and twice the price of an ordinary engine, although its water-throwing capacity bears no such ratio of increase.

## BRITISH WHEAT IMPORTS.

The *London Times* says: "The subjoined table, which gives the value of our imports of wheat from various countries for the eight months ended August 31, shows that the United States has profited appreciably by the partial failure of the supplies usually put on the market by its competitors:

	1896.	1895.	1894.
Russia.....	£3,412,000	£4,407,000	£2,871,000
United States.....	6,040,000	5,350,000	5,124,000
Argentina.....	1,331,000	2,735,000	2,334,000
India.....	512,000	1,539,000	966,000
Australasia.....	2,000	889,000	747,000
British North America.....	631,000	326,000	458,000
Other countries.....	1,288,000	827,000	612,000
Totals.....	£13,211,000	£16,073,000	£13,092,000

## SENSIBLE ADVICE.

I believe that many grocers lose trade because they do not use proper methods of following up customers who leave them. The tendency of the average grocer when a customer leaves him is to get stiff and huffy. "Well, if they can get along without me, I can get along without them. I guess my store will go on just the same," I used to say sarcastically. But all the same the customers who left seemed able to get along without me, while I was not so able to get along without them. At last I resolved to swallow my pride, and see if I couldn't stem the tide.

I gave my clerks strict instructions to let me know when any customer stopped buying, no matter if he only bought \$2 worth a week. I might just as well have that \$2 as the other fellow. Pretty soon one of the clerks said to me, "Mrs. Smith didn't give her usual order to-day." That started me off. I went right down to Mrs. Smith's house. She had been a customer of mine for four years, and I knew something must be the matter or she'd never leave me.

My natural tendency was to say, "Well, let her go where she will. I can get along without her trade, I guess." I was wrong. No grocer can get along without any trade he can get or keep.

Well, to go on, I went down to Mrs. Smith, and asked her in as smooth a way as I could what the matter was. It happened that the store boy had neglected to deliver some order as she had told him, and the old lady got quite huffy. It took only ten minutes to straighten her up, and I took the regular weekly order away with me in my pocket. That has been a year ago. Since then dozens of customers have left me, but I went to see every one immediately, and out of all the lot who got angry over some trivial thing, I have only lost one, and he had a good reason, because his wife's cousin had just opened a new store. If I had not gone to see these customers, I would have lost them, because they were all feeling aggrieved and would never have come back. One day I figured up the aggregate of their trade, and I discovered that it was over \$3,000 per year. That seems like an extravagant statement, but my books will show it. I would have lost \$3,000 worth of trade simply by neglect if I had let those customers go without seeing what the matter was.—*Reuben R. Crosby in Grocery World.*

## SHEEP FLOCKS OF THE WORLD.

The number of sheep in the world in 1893 and in 1896 has been given as follows:

	1893.	1896.
North America.....	51,292,797	42,470,339
South America.....	96,242,137	89,360,010
Europe.....	191,688,503	184,750,947
Asia.....	35,378,066	38,636,232
Africa.....	35,589,208	34,994,957
Australasia.....	124,645,606	121,165,477
Oceanica.....	12,607	12,607

Totals..... 534,848,924 511,390,569  
\*United States..... 47,273,553 38,298,783

\* Included in North America, but also placed separately for sake of comparison.

## HORRORS OF MODERN PRISONS.

From The London News.

The official belief is that there is little or no prison-made insanity. - Prison doctors are keenly alive to the possibility of shamming, and they hesitate to admit that there is any flaw in the system for the administration of which they are so largely responsible. Still the fact remains that the ratio of insanity in prisons has exactly doubled since 1877.

The admitted general increase of insanity is not sufficient to account for this startling fact. Prison discipline is now more mechanical, and, therefore, more depressing. Its very improvements in this respect "take the heart out of a man." It is probable that prisoners were far happier in the old unreformed prisons, when they herded together and had companionship of a kind.

An expert witness who had passed four-and-twenty years in jail told the Prison Committee some startling things from the convict's point of view. The rules, he said, are too minute for human observance, and some minds are totally unable to bear the strain of them. A man may be reported for knocking something over in his cell, though it may be by pure accident. The name for this offence is "unnecessary noise." As the poor wretches walk their weary round in the exercise yard, one may fall out of step and thus throw the others out. The first offender or the last—any one, in fact, on whom the warder's eye happens to fall—is liable to punishment for this mischance.

In this way the convict gradually acquires an expression that never leaves him the round-the-corner glance of a being who dreads a tyrant on the pounce. We want a new Howard if the system is only half as bad as it is said to be by those who have best reason to know.

## SEA RAFTS NOT A SUCCESS.

The second log raft to successfully make a trip down the coast has reached San Francisco. As in the case of the one taken down a year ago, the weather was exceptionally favorable, as the ocean has been like a mill pond for weeks. Inasmuch as there are only rare periods when the waves are harmless, the success of this method of transferring timber is as yet rather limited. Two rafts have been lost and two have gone through in safety. A system that necessitates waiting a year for a favorable chance to operate it, can hardly be called a success.