Since the 1st of September 20,000 bushels of potatoes have been used, and the codfish comprises several hundred quintals. The goods are shipped by the carload to Chicago St. Louis, San Francisco, Pittsburg, and other Western points. A case of the goods was on exhibition at the Paris Exhibition, for which a medal was awarded, and orders have been filled for France, England, Scotland, South America, Turkey, and China.

THE LAUNDRIES OF NEW YORK.

The manager of one of the larger laundries of New York lately said that there were between five and six hundred important laundries in the city, counting steam laundries that do the work of large manufacturers of white goods and of hotels and restaurants, and the hand laundries doing household work. The first steam laundry was started in Boston, in 1853. Several steam laundries in New York employ from 100 to 150 hands. The Empire Laundry, doing the work of fifteen hotels and restaurants, turns out 40,000 pieces a day, or more than 1,000,000 a month, washed, dried and finished. These pieces include sheets, pillow cases, white towels, silver towels, brown towels, brown table cloths, white table cloths, napkins, curtains, jackets, aprons, counterpanes, blankets, bed covers, pillow covers, chair covers, table covers, crumb cloths, and doilies. In the performance of this work there are used $4,000 worth of soap, $1,000 worth of starch, $250 worth of bluing a year, and the pay roll amounts to $25,000 yearly.

Another laundry manager said that the amount of private washing done in the public laundries has increased immensely since the establishment of the first large public laundry, the New York, at Bergen, N. J., in 1866. The largest are the St Denis, California, Home, Stuyvesant, and New York. The work they do is mainly for persons living in flats, boarders, bachelors, and transient hotel guests. Notwithstanding the great facilities offered by the public laundries, most housekeepers prefer to have their washing done at home. The public laundries that do private washing do not use steam or any machinery except the simple "patent wringer" and "housewife's washboard," because no machinery ever invented could do the necessary fluting, puffing, scalloping, and doing up. The charges range from 75 cents to $9 a dozen.

The laundry business requires very little capital; the work is simple and the terms are invariably cash. No class of business men lose so little money from bad debts as the laundry men, and the reason is plain; they always have ample security for their bills in the clothing that they wash, and clothing is never returned until the bill is paid.

It is estimated that from one and a half to five million dollars are invested in laundries in New York, giving employment to from ten to twenty thousand persons.

HAECKEL ON EVOLUTION.

In his reply to Professor Virchow's charge that the evolution theory is as yet a matter of opinion, not a demonstrated position in science, Professor Haeckel takes occasion to state very forcibly the nature and scope of the theory of descent and the broad ground of fact on which it rests.

However complex in its details, the great problem of organic derivation is essentially simple. Species must have come into existence in one of two ways—by natural development or by supernatural creation. There is no third way. On the one side is the old theory that organisms were created specifically distinct, as they are, as they were, as they ever must be, independent in origin and permanent in form and character. On the other hand stands the theory that the different species of organisms are intimately related, have developed naturally from earlier forms, have descended from common ancestral types. On which side lies the weight of evidence? At starting, Professor Haeckel concisely defines the relation of the three great theories of modern biology: 1. Monism, the universal theory of evolution, or the monistic progenesis theory, is the only scientific theory, which rationally explains the universe and satisfies the desire for causality in the human mind, since it brings all natural phenomena into a mechanical causal connection as parts of a great and uniform (*einheitlich*) process of development; 2. Transformism, or the theory of descent, is an essential and indispensable part of the monistic evolution theory, because it is the only scientific theory which explains the origin of organic species in a rational manner, namely, by transformation, and reduces this transformation to mechanical causes; 3. The theory of selection, or Darwinism, is up to the present the most important one among the different theories, which try to explain the transformation of species by mechanical causes; but it is by no means the only one. Even if we suppose that most species have originated through natural selection, yet we know, on the other hand, that many forms called species are merely hybrids from two different species and are propagated as such; at the same time we can easily conceive that other causes may be acting in the formation of species, causes of which we have no idea at present. To decide what importance natural selection has in the origin of species is left to the judgment of the various naturalists, and in this question the authorities differ materially even to-day. Some ascribe a greater, others a smaller importance to it. But the different estimation of the value of Darwinism is quite independent of the absolute validity of the theory of descent, because the latter is up to the present the only theory which explains, in a rational way, the origin of species.

The theory of creation explains nothing, and is inconsistent with a vast multitude of demonstrated facts and laws. The scientific certainty of the theory of descent, on the contrary is based upon the totality of biological phenomena. Professor Haeckel shows that all phenomena of morphology and physiology, of chorology and œcology, of ontogeny and palæontology, can only be explained by the theory of descent, and reduced to mechanical causes. The guarantee of the truth of the theory lies particularly in the fact that the last simple causes are the same for all these complicated phenomena, and that other mechanical causes cannot be imagined. If further proofs are demanded, where are they to be looked for? In Professor Haeckel's words, "where in the world are we to find 'facts' which speak louder than the facts of comparative morphology and physiology, the facts of rudimentary organs and of embryonal development, than the facts of palæontology and of the geographical distribution of organisms—in short, than all the known facts from the most various biological domains?"

If the theory of evolution is not amply proved by the facts already in possession, then, Professor Haeckel asserts, the theory never will be proved.

A GREAT MARKET FOR OUR CATTLE AND OTHER PRODUCE.

Under rules lately adopted by the British Government, which went into effect on New Year's Day, the United States will have the advantage over many other countries in landing cattle in the United Kingdom, as from Russia, Austro-Hungary, Turkey, Greece, Italy, and Roumania live cattle cannot be landed, and from Germany, Holland, Belgium, and France cattle can only be landed at six ports, under strict inspection, to be slaughtered within ten days of their arrival; but cattle from Denmark, Sweden, Norway, Spain, Portugal, and the United States are exempt from compulsory slaughter or quarantine.

The immediate effect of these rules will be to confine the large supply of cattle required by England to a few purveyors, among which the United States is much the largest producer, as the severity of the regulations will practically prevent the nations in the second list from engaging actively in the live cattle trade, and those in the last list, with the exception of Canada, have comparatively few cattle to export.

More than 60 per cent of the people of Great Britain are dependent on foreign food supplies, while her steadily growing population is increasing this dependence every year.

The numbers of live animals imported into the United Kingdom during the year 1877 were about 300,000 cattle, 1,000,000 sheep, from 40,000 to 50,000 swine, 30,524 horses, and the imports of last year are believed to largely exceed those numbers. Since the 1st of last May and up to the 1st of September there have been an average of 3,000 cattle a week shipped to Great Britain from Montreal, Boston, New York, Philadelphia, and Baltimore. This trade, however, is in its infancy as yet, and will, without doubt, grow immensely beforelong, when the best methods of shipping have been devised and the prejudices against American meat been overcome. With the immense quantity of cheap grazing lands we have we can defy competition to other countries in raising cattle.

Returns of British grain imports from the various countries for a period of nine months ending October 31, 1878, show:

From.	Cwts.
Russia	7,432,443
Germany	4,112,184
France	11,061
Turkey, Wallachia, and Moldavia	200,857
Egypt	193,194
United States (on Atlantic)	20,903,997
" " (on Pacific)	4,208,942
Chili	49,994
British India	1,577,342
Australia	1,309,559
British North America	1,968,244
Other countries	214,285
Total	42,182,102

From this it will be seen that the total quantity received from the United States was 25,112,939 cwts., or 59½ per cent of the total importations.

The annual importation of food into Great Britain is about $800,000,000 worth, of which a large proportion will be drawn from this country if we pay proper attention to the business. To make the most of this grand market every facility should be given to shippers by cheapening freights, lessening the amount of handling or transferring from cars to vessels, or *vice versa*, and increasing our inland water transportation facilities, as the difference of a cent or two per bushel in the cost of freighting or handling grain may largely influence the trade in that article and make all the difference between a very profitable business and a losing one.

A HINT FOR AN INVENTION.

We call the attention of inventive and practical men to the defects of locomotive boilers, and the advantages which would result from their improvement.

A locomotive boiler has three principal parts, all imperfect in greater or less degree. These are the fire box, the tubes, and the smoke box. The fire box has rectangular walls, surrounded by water, except under the grate, and where the fire door is placed. This is an arrangement necessitated by the requirements of science and not indicated by rules of utility or good construction. The flat form of the fire box walls and of that part of the boiler which covers it, takes away from them strength of resistance, save what is given to each by the other by stays in immense number. These must resist an enormous pressure, especially the roof of the fire box, where it is not counteracted by any opposite pressure, and sometimes may amount to 200 tons.

This arrangement prevents proper cleaning of the outer walls of the fire box and the inner walls of the boiler plates opposite. It is about the same thing where the tubes are; and these, rarely over 2½ inches in diameter, are so numerous that it as difficult to clean them exteriorly as it is to clean that portion of the boiler surrounding them.

The draught, urged by the jets of exhaust steam in the stack, is so strong that the air and gases in passing through the tubes at a high rate of speed drive with it a considerable quantity of fine dust, the residue of combustion of coke or other fuel; this dust scratches and cuts the tubes so as to necessitate their renewal. The dilatation and contraction of these tubes also cause leaks and repairs. The forced draught also costs dear in another way; because this steam jet creates a back pressure in the cylinders, frequently amounting to one third the effective pressure. Further, the space left above the tubes and the smoke box is so small as to reduce too much the proportion between the steam volume and the heating surface. It is also not unfrequent that the steam carries with it half its weight of water.

Ancient Letters in Modern Tattooing.

At a recent meeting of the British Anthropological Institute Mr. Park Harrison read a paper on some characters which are still in use as tattoo marks by the Motu, a people located in the southeastern peninsula of New Guinea, and described by the Rev. Dr. Turner as a race superior to the Papuans, from whom they differ both in color and customs. About half of the more distinctive forms tattooed on a Motu girl, carefully copied by Dr. Turner, correspond with letters in the Asoka inscriptions in India, which are believed to be allied to Phœnician, while several others resemble letters admittedly derived from the same stock, but independently acquired. The marks are mostly arranged in groups of three; on the right arm, however, nine or ten are apparently connected by a line running above them all. The characters are twenty-three in number, and are formed of straight lines in the following combinations, viz.: five of 2 lines, nine of 3 lines, five of 4 lines, and three of 5 lines, much in the same proportion as in the Rejang and Lampong alphabets of Sumatra, the letters of the former of which have been shown to be identical with Phœnician characters reversed. Archaic forms of letters have also been met with in several islands of the Indian Archipelago and Melanesia, but are now without meaning. The Motu characters are used simply for ornament or as charms. As an example of the use of letters for tattoo marks, the case of the Austrian subject was cited, who, having been taken prisoner in Burmah, a few years ago, was there tattooed with letters and other patterns. Besides the characters on the Motu girl, there were various pictures, or hieroglyphics, consisting of eyes and eyebrows, a lunar crescent, and other forms.

How Diphtheria was Spread.

A few weeks ago a little girl in St. Albans, who had just recovered from diphtheria, was taken by her parents to visit a family in a neighboring town. She slept with the children in that family, and shortly afterward three or four of them were taken with the malady, and some have since died. The family permitted relatives and neighbors to visit them, and the result is several cases in the neighborhood. They had public funerals, even keeping the remains of one child an unusual time, waiting for another to die, so as to bury them together; and this also spread the contagion. The physician was not powerfully impressed—as some physicians are not—with the contagious character of the disease; therefore, he did not take the necessary precautions for the protection of the neighborhood or of his own family, and the result is that one of his own children has died and another is dangerously ill. A lady who went to one of these houses to robe the victims for the grave has called at houses in the vicinity where there are children, without any change of her garments or any attempt at disinfection, and has fondled the children in those families, apparently in utter ignorance of the danger to which she was exposing them.—*St. Albans (Vt.) Messenger.*

Women Inventors.

The question is often asked us: Do the inventions of women ever amount to anything? From our long experience with inventors of both sexes, we conclude that a larger proportion of inventions patented by women prove useful and profitable than those of the sterner sex. We see by the New York *Sun* that the Metropolitan Elevated Railway Company has selected a device, from the many that have been under consideration, for lessening the noise of the trains, and that it is the invention of a Mrs. Walton, of this city. The plan consists of boxing the rails in a mixture of sand, tar, and cotton, and has been under test for two months on several blocks of the road in Sixth avenue. The ringing of the wheels on the rails, which makes a large part of the objectionable sound, is considerably deadened. She gets, according to the *Sun*, $10,000 for the use of the invention on the Metropolitan line, and the company is to control its adoption on other roads, paying her a royalty.