that the nesting would be the most extensive ever known in the State. The news speedily reached all parts of the State, and it is said that in a fortnight's time three thousand hunters—professionals, amateurs, greenhorns—had invaded the country from all directions, surrounding and penetrating the nesting grounds.

It was noticed, however, by old hunters that the birds did not settle down to domestic life as quickly as usual. The roosting birds—that is, those who had not yet mated—outnumbered the nesting birds a hundred to one. Some of the more zealous and inconsiderate sportsmen entered the nesting woods and commenced popping away at the nests themselves, a snow storm followed, high winds prevailed, and many of the roosting birds, disgusted, postponed their anticipated housekeeping, and scattered. The nesting consequently falls far short in magnitude of what was at first expected, though still large in area and containing millions of birds. It scattered along the banks of the Platte River, the townships of Almira, Zeeland, and Homestead. The distance from one end to the other is over ten miles, and the width varies from a few rods to three or four miles. There are, however, numerous long distances between the two extremes where no nests are to be found, and the birds have occasionally changed their ground, so that many of the hunters themselves are very uncertain as to the exact whereabouts of the birds at the present time. In the nests first made the young are about ready to fly, and have been abandoned by the old birds, and in some places, owing to the winds and the constant shooting, the nests have been deserted before any birds were hatched.

One nesting is about the same as another, and the first nest you come to is like the million others in the county. When these migratory birds have mated, decided where to settle, and have staked off their claim, they proceed at once to construct about the slightest nest that will hold an egg and a bird. "Three sticks and a feather" constitute about the material, according to a recent visitor here. The feather is often wanting, but a few more sticks are generally added. The nest is placed in the crotch of a tree, on two forked branches, or anywhere else in the tree where suitable support can be found. Cedar trees along the river bottoms seem to be preferred, but when the nestings are large, beech and other trees are occupied. From half a dozen to fifty or sixty nests are built in a tree, and only one egg is laid in each nest.

NATURAL HISTORY NOTES.

Interdependence of Plants and Animals.—Few, perhaps, know that a certain little gall fly (*Cynips*) of Asia Minor decides on the existence of tens of thousands of human beings. As our clippers and steamers carry the produce of the land from continent to continent, so these tiny sailors of the air carry the fertilizing pollen from the male to the female flowers of the fig tree. Without pollen there come no figs, and consequently on the activity and number of the gnats depends the productiveness of these trees. The fruit of the fig is not, as in most other cases, a pericarp enveloping the seed, but a common calyx or receptacle which incloses the flowers. In the center of this receptacle the cavity is lined with a multitude of flowers, the male and female blossoms being on distinct plants. The medium of communication to these flowers is only a small aperture at the summit of the receptacle. Hence the access of pollen to the female blossoms is impossible by the ordinary means of transmission, and this is accomplished by the little gnat, which is continually fluttering about from fig to fig for the purpose of finding a suitable place in the cavity to deposit its eggs. These gnats, therefore, regulate in fact the extensive and profitable fig trade of Smyrna. A little ugly beetle of Kamschatka has, in a like manner, more than once saved the entire population of the most barren part of Greenland from apparently unavoidable starvation. It is a great thief in its way, and a most fastidious gourmand moreover. Nothing will satisfy it on a long winter evening—and we must bear in mind that these evenings sometimes last five months without interruption—but a constant supply of lily bulbs. The lilies are well content with this arrangement, for being eaten comes as natural to them as to a Fiji islander; and they are, as a compensation, saved from being crowded to death in a narrow space, while those that escape the beetle shoot up vigorously the next summer in rich pastures. Still better content are the Greenlanders; for, when their last mouthful of meat and their last drop of train oil are gone, they dig up and rob the provident little beetle of its carefully hoarded treasures, and, by its aid, manage to live until another season.

Self Defence among Plants.—Dr. Beccari describes an epiphytal plant, a *myrmecodia*, growing on trees in Borneo. Its seeds germinate, like those of the mistletoe, on the branches of the tree; and the seedling stem, covered by the cotyledons, grows to about an inch in length, remaining in that condition until a certain species of ant bites a hole in the stem, which then produces a morbid gall-like growth, which ultimately becomes a tuber-like body, constituting the home of the ants. Dr. Beccari asserts that the presence of these ants is an essential to the plant's existence, for unless the young plants are thus attacked by these insects they soon perish. The ants then protect their plant home by rushing fiercely out on the intruders. The white sessile flowers in this species are produced on the tuber-shaped body of the plant.

Dispersion of Seeds.—Says Professor Prentl, in a recent lecture on the means taken by plants to disperse their seeds: "Seeds that have not learned to fly with their own or other people's wings, are taught, it seems, to swim. Trees and bushes which bear nuts love low grounds and river banks. Why? Because their fruit is shaped like a small boat, and the rivulets playing over silvery sands, as well as the broad waves of the Pacific, carry their seed alike safely and swiftly to new homes. Rivers float down the fruits of mountain regions, into deep valleys and to far off coasts, and the Gulf Stream of our own Atlantic carries annually the rich products of the torrid zone of America to the distant shores of Iceland and Norway. Seeds of plants growing in Jamaica and Cuba have been gathered in the quiet coves of the Hebrides. The fruit of the red bay has the form of a piroque; at first it sinks to the bottom, but nature has given it a small hole in the upper part; a little air bubble forms there, and causes it to rise again. The gigantic sea cocoa itself, weighing not rarely more than five pounds, but air-tight in its close shell, and buoyant by reason of its light, fibrous coat, is thus drifted from island to island, and rides safely on the surges of the ocean from the Seychelles to the distant coast of Malabar. There it lodges and germinates in the light moist sand, so that the Indians of old fancied that these fruits grew under water, and called them "sea cocoas." A still more striking provision of nature is this, that there are some seeds of this kind so exquisitely adjusted to their future destination, as to sink in salt water, while they swim with safety in fresh water."

The Pedigree of the Dog.

While considering the problem of the origin of the dog, in a recent lecture at the Royal Institute, in London, Prof. Huxley expressed the opinion that its solution was easy if a beginning was made upon a solid basis of fact. Such a basis of fact was supplied by what was known of the origin of dogs in North America. The Indians of the northwestern parts of America were all in possession of half-tame cur-like dogs, living in the same way as the dogs in Egypt—in a semi-independent condition. In the same country there existed a wild animal—the *Canis latrans*, or prairie wolf. It was impossible to point out any distinction between these prairie wolves and the domesticated dog of the Indians. It was somewhat difficult to understand how these wild and fierce animals could be tamed; and yet, when one knew their habits, it was easy enough. The smaller wolves and jackals, although predacious and fierce, were endowed with singular curiosity; that curiosity directed them toward man and his doings. There was not one of these animals which, if caught young—whether jackal or small wolf—could not be tamed and made as attached and devoted to man as any ordinary dog. It was not difficult to understand, therefore, how these animals became acquainted with man, how they became trained, and how from them sprang a race of domesticated animals which, curiously enough, were far more attached to their masters and the animals with which they were brought up than to members of their own family. If they could depend upon the fact that this one domestic dog originated in the taming of an indigenous wild animal, then the general problem of the origin of domestic dogs would take this form—could they find in all parts of the world in which domestic dogs were known wild stock so similar to the existing race of dogs that there was nothing unnatural in supposing that they had the same origin as the Indian dogs? They might trace dog-like animals further and further west, until, in Northern Africa, they had a whole series of kinds of dog-like animals, usually known as jackals. He believed that these wild stocks were the source from which, in each case, the savages who originally began to tame dogs had derived the stock. This view was confirmed by archæological researches. They had preserved to them, on the monuments of ancient Egypt, a great variety of forms of dogs, and it was significant that the further back they went the fewer were the varieties, until, at the time of the third and fourth dynasties—that is about 6,000 years ago—there were only two well marked forms of dogs. One of them was a comparatively small cur-like dog, similar to that which was to be seen in the streets of Cairo at the present day, and the other was like a greyhound. The cur was, no doubt, a tame species of the wild jackal, which was still to be found in the same country; and with respect to the greyhound, there was in Abyssinia a very long-headed dog, which was very much of the same form as the greyhound, and which, it could hardly be doubted, was the source from which it sprang. Assuming that there was no doubt that the origin of dogs could be traced to these sources, the more modified forms of the domestic animal were simply the result of the selected breeding, which had given rise to the same modification in dogs as it had done in the case of pigeons.

Apple Borer.

A subscriber asks how he can get rid of the apple borer. According to a writer on horticultural and agricultural subjects, when borers have once gained possession of a tree the only way to get rid of them is to hunt for them carefully with a knife or wire and destroy them. The eggs of the parent beetle are deposited during nights in June, and are placed in the bark of the tree at the surface of the ground, or whatever may surround the tree. These eggs hatch in our latitude during September; and it is soon after this that the young grub may be easily removed without the use of anything more than the point of a penknife. A few minutes spent in this way about the first of October each fall will keep the tree from this pest.

RECENT DECISIONS RELATING TO PATENTS, COPYRIGHTS, ETC.

Supreme Court of the United States.

BAKER *vs.* SELDEN.

(*Decided October Term*, 1879.)

1. The copyright of a book, if not pirated from other works, will be valid without regard to the novelty of the subject matter.

2. The description of an art in a book entitled to the benefit of copyright lays no foundation for an exclusive claim to the art itself. The description alone can be protected by copyright. The art can only be secured, if it can be secured at all, by letters patent.

3. A work on the subject of book-keeping, explanatory either of old systems or of an entirely new system, considered as a book conveying information on the subject and containing detailed explanations of the art, is the subject of copyright; but the use of the peculiar systems of book-keeping described cannot be protected thereby.

4. Blank account books with ruled lines and headings are not the subject of copyright, nor can the copyright of a work on book-keeping with portions illustrated by such ruled lines and headings secure the exclusive right to make, sell, and use account books prepared upon the plan set forth in such book.

5. Although the proofs show that the defendant makes account books arranged on substantially the same system as that explained in the copyrighted book of the plaintiff, it does not appear that he has violated the copyright of the same regarded merely as an explanatory work, and, as the plaintiff is not entitled to an exclusive right in the system, the charge of infringement is not sustained.

Appeal from the Circuit Court of the United States for the Southern District of Ohio.

Mr. Justice Bradley delivered the opinion of the Court.

Among other things stated is the following:

The remarks of Mr. Justice Thompson in the Circuit Court in the case of Clayton *vs.* Stone & Hall (2 Paine's Rep. 392), in which copyright was claimed in a daily price-current, are apposite and instructive. He says:

In determining the true construction to be given to the act of Congress it is proper to look at the Constitution of the United States to aid us in ascertaining the nature of the property intended to be protected. "Congress shall have power to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their writings and discoveries." The act in question was passed in execution of the power here given, and the object, therefore, was the promotion of science; and it would certainly be a pretty extraordinary view of the sciences to consider a daily or weekly publication of the state of the market as falling within any class of them. They are of a more fixed, permanent, and durable character. The term "science" cannot, with any propriety, be applied to a work of so fluctuating and fugitive a form as that of a newspaper or price-current, the subject matter of which is daily changing and is of mere temporary use. Although great praise may be due to the plaintiffs for their industry and enterprise in publishing this paper, yet the law does not contemplate their being rewarded in this way; it must seek patronage and protection from its utility to the public, and not as a work of science. The title of the act of Congress is "for the encouragement of learning," and was not intended for the encouragement of mere industry unconnected with learning and the sciences. . . . We are accordingly of opinion that the paper in question is not a book the copyright to which can be secured under the act of Congress.

The case of Cobbett *vs.* Woodward (L. R., 14 Equity Cases, 407) was a claim to copyright in a catalogue of furniture which the publisher had on sale in his establishment, illustrated with many drawings of furniture and decorations. The defendants, being dealers in the same business, published a similar book, and copied many of the plaintiff's drawings, though it was shown that they had for sale the articles represented thereby. The court held that these drawings were not subjects of copyright. Lord Romilly, M. R., said:

This is a mere advertisement for the sale of particular articles which any one might imitate, and any one might advertise for sale. If a man, not being a vendor of any of the articles in question, were to publish a work for the purpose of informing the public of what was the most convenient species of articles for household furniture, or the most graceful species of decorations for articles of home furniture, what they ought to cost, and where they might be bought, and were to illustrate his work with designs of each article he described—such a work as this could not be pirated with impunity, and the attempt to do so would be stopped by the injunction of the Court of Chancery; yet, if it were done with no such object, but solely for the purpose of advertising particular articles for sale, and promoting the private trade of the publisher by the sale of articles which any other person might sell as well as the first advertiser, and if in fact it contained little more than an illustrated inventory of the contents of a warehouse, I know of no law which, while it would not prevent the second advertiser from selling the same articles, would prevent him from using the same advertisement, provided he did not in such advertisement by any device suggest that he was selling the works and designs of the first advertiser.

Another case, that of Page *vs.* Wisden (20 *Law Times* Rep., N. S., 435), which came before Vice-Chancellor Malins

in 1869, has some resemblance to the present. There a copyright was claimed in a cricket scoring sheet, and the Vice-Chancellor held that it was not a fit subject for copyright, partly because it was not new, but also because "to say that a particular mode of ruling a book constituted an object for a copyright is absurd."

The decree of the Circuit Court must be reversed, and the cause remanded, with instructions to dismiss the complainant's bill.

WOODBURY PATENT PLANING MACHINE COMPANY *vs.* KEITH.
(*Decided October Term*, 1879.)

1. Woodbury filed a caveat May 28, 1846, and his application June 3, 1848. The latter was rejected February 20, 1849, and the fee withdrawn in October, 1852. Under the act of 1870 the application was renewed within the six months allowed, and the patent granted April 29, 1873. No serious attempt having been made to procure a re-examination of the old application, or to renew it, for a period of more than twenty years, though during more than sixteen years of that time the improved device had been in common use with the knowledge of the patentee, it was held that the invention was abandoned before the renewed application was made.

2. The action of the Commissioner of Patents in granting a patent, under section 35 of the act of 1870, is not conclusive on the question of abandonment.

3. The rule of the Patent Office prior to the passage of the act of 1870, that an application rejected, or not prosecuted within two years after its rejection or withdrawal, should be conclusively presumed to have been abandoned, though not always adhered to, had held it to be a question of law in the cases to which it applied, and the effect of the statute was rather to change the rule than to make the decision of the Commissioner granting a patent an unreviewable decision that the invention had not been abandoned.

4. Section 35 of the act of 1870 declares abandonment to be a question of fact, and patents granted thereunder are just as impeachable as those granted under section 24, whereby the Commissioner is authorized to deal with the question of abandonment as well as public use and sale and originality of invention.

5. Abandonment, although a matter of intention on the part of the inventor, need not be expressed in words, but may be gathered from the acts of the inventor.

6. Abandonment may occur as well after an application has been made and rejected or withdrawn as before, and evidenced in the same manner.

7. The law requires and favors diligence in prosecuting the claims to an exclusive right, and an inventor cannot, *without cause*, hold his application pending during a long period of years, leaving the public uncertain whether he intends ever to prosecute it, and keeping the field of his invention closed against other inventors.

8. Circumstances may arise which will excuse delay in prosecuting an application, such as extreme poverty or protracted sickness; but in the absence of any such excuse entire inaction on the part of the inventor, coupled with long-continued public use without complaint or remonstrance on his part, constitute abandonment to the public.

9. The rule of the Patent Office that an application rejected, or not prosecuted within two years after its rejection or withdrawal, should be conclusively presumed to have been abandoned, was not a statutory rule, nor inflexible in its application, but was frequently departed from and abolished before the act of 1870, and was no bar to a movement on the applicant's part to have his application reinstated after withdrawal, or to have it re-examined, or take an appeal, or file a new one, and cannot be regarded as an adequate excuse for a long delay.

10. Woodbury's invention, patented April 29, 1873, was anticipated by the machine made by Alfred Anson in 1843, and in constant use for thirty years.

11. Mere enlargement of a machine to strengthen or increase its capacity is the work of the mechanic and not invention.

12. An objection to the examination of a witness should state specifically the grounds of the objection, in order that the opposite party may have the opportunity of removing it, if possible.

13. Under section 4920 of the Revised Statutes only the names and residences of those who had invented or used the anticipating machine or improvement, and not the names of those who are to testify of its invention or use, are required to be pleaded.

Bill dismissed with costs.

The Sense of Space.

At a recent meeting of the French Society of Biology M. Mathias Duval reported what he believed to be an important discovery in relation to the origin of the auditory nerve. He finds, in the course of his researches upon the origin of the cranial nerves, that the auditory nerve has two quite distinct roots, the posterior one proceeding from a nucleus, described by all authors, the other, anterior, proceeding from a nucleus for motor fibers. Some fibers of the anterior root turn back into the cerebellum. Now, we know that the cerebellum is the center for the co-ordination of movements. In associating this anatomical fact with the physiological researches of M. De Cyon, upon the sense of space, and with some pathological facts, tending to prove that vertigo has for a cause a lesion of the semicircular canals, M. Duval concludes that the anterior root of the auditory nerve forms the *nerve of space*, of which the semicircular canals are the peripheric organs.

Minneapolis Flouring Mills.

The pride of Minneapolis, and one of the principal factors in the wonderful growth and prosperity of our city, are the unrivaled and matchless flouring mills which line the bank of the Mississippi River at the Falls of St. Anthony, and whose unequaled products have already given to Minneapolis flour a world-wide reputation. Twenty-four of these splendid mills, which stand as monuments of Minneapolis courage and enterprise, have already been erected, and others, still more extensive and imposing, are to follow at an early day. Among the most prominent of those already constructed are the great Washburn A and B, and the Crown Roller mills. The Washburn "A," standing on the site of the one destroyed by the explosion of May 2, 1878, is 100x244 feet, is nine stories high, and will, by the adoption of newly invented machinery, have a capacity of 3,000 barrels daily. The Crown Roller Mill, now nearly completed, has a ground surface of 124x144 feet, is eight stories high, and, using the most improved styles of machinery, will be able to turn out 2,500 barrels daily. Both of them are to be illuminated with the newly invented electric lights, and are, in all respects, the largest and most complete flouring mills in the world. The highest grades of flour are made at these 24 mills, which is eagerly sought for in the markets of the world. The entire daily products of these mills, when fully completed and running, will reach the enormous amount of 17,500 barrels every 24 hours, and requiring, if the mills be run 300 days in the year, not less than 25,000,000 bushels of wheat for their use alone, or far more than one-half the entire present wheat production of the State.

The effect of this constant demand upon the crop of our State is already well understood by all intelligent business men and farmers, steadily maintaining as it does the price of wheat from 5 to 10 cents per bushel above what it would be if left to be governed alone by the Milwaukee, Chicago, and Eastern markets. The average price received by the farmers of Minnesota for their wheat during the years '77, '78, and '79, by reason of the local market of Minneapolis, is not less than 7 cents per bushel on the crops named more than they would have received if left to the control of the Milwaukee and Chicago markets, or in the aggregate not less than $7,000,000 has actually been added to the pockets of the wheat-growers of our State by the existence and operations of the Minneapolis millers. This vast sum of money has not only been received by the farmers to add to their comforts and conveniences of life, but has gone through their hands to swell the great volume of trade which has built up our towns and commercial centers. This fact alone, now so well understood by the wheat-growers of Minnesota, is a complete and conclusive answer to charges of political knaves and demagogues who occasionally seek, during election campaigns, to represent the Minneapolis millers as the natural enemy and scourge of the wheat-growers of our State. The growth and development of the milling interests of Minneapolis are strikingly shown by the following list of shipments for the years named:

Year.	Barrels.
1860	30,000
1865	98,000
1870	193,814
1873	583,009
1874	727,157
1875	843,769
1876	1,000,676
1877	935,544
1878	940,876
1879, estimated in part	1,500,000

In explanation of the diminished shipments in 1877 and 1878, we would state that in 1877 there was an almost entire failure of the wheat crop in a large territory from which the mills drew their supplies; and in May, 1878, over two-fifths of the milling capacity was destroyed by fire, and in November another twelve-run mill shared the same fate.

Before dismissing this subject it may be of interest to the general reader to know that, in Minneapolis, the so-called "patent process," by which the highest grade of flour is produced, was first developed, and to show its advantage to the State at large, it is only needful to add that before the new process was developed, spring wheat—the only kind successfully cultivated here—sold for an average of twenty-five cents a bushel below the price of winter wheat. To-day, by the "patent process," the price of spring wheat, such as our farmers raise, is worth more than winter wheat, for the reason that the "patent process" can be applied only to this kind of wheat, and the product leads the price in the flour markets of the country.

The future of this great interest of our young city it is hardly possible to imagine. As yet it is but in its infancy, and already has its firm grasp upon the markets of the world. How rapidly it is extending itself will be seen by the following facts:

In 1875 Mr. George H. Christian went abroad with the view of studying foreign milling processes, and introducing, if possible, Minneapolis flour upon the European market. Mr. Christian learned much of foreign milling, but met little success as to the other part of his mission. For two years following, the quality of our wheat was such as to render it difficult to keep the grade of our flour up to a satisfactory standard, and no effort was made to cultivate a foreign market. In the spring of 1877, Mr. L. Christian went abroad to follow still further the previous investigations of his brother G. H., and to study more closely the flour trade of the leading cities of the Old World, and on his return Mr. W. H. Dunwoody went out to still further study the question of direct trade between the Minneapolis manufacturers and the leading flour houses in England and Scotland. The result of these various missions was that foreign dealers became better informed as to the character of our flour and the advantages of introducing it to their customers, and in 1878 a small direct export trade confined mainly to "bakers'" and low grades was established. Later on, small samples of the "fancy" were ordered for Liverpool, London, and Glasgow, and the trade once inaugurated increased rapidly until it had thus early grown into considerable magnitude, and not less than 450,000 barrels, or their equivalent in sacks, have been shipped during 1879 direct from the mills in Minneapolis to leading points in the United Kingdom, France, Germany, Spain, and Italy, while direct shipments have also been made to Alexandria, Egypt. To-day there is not a port in Europe to which through bills of lading cannot be obtained in Minneapolis at fixed rates.

English millers and dealers who have visited our great mills during 1879 have frankly stated that in their opinion the fine grades of Minneapolis spring wheat flour are destined to supplant the products of the Hungarian mills which have controlled the English market for so many years. The trade thus sought to be established amounted in 1878 to but $763,281, but in 1879 had increased to $3,150,000. What that trade will amount to in the future can be predicted only from its wonderful triumphs in the past.—*Pioneer Press.*

The Paris Abattoir.

The slaughter houses of Paris are located at La Villette, on the outskirts of the city, and form, together with a police station, telegraph office, barracks for a small force of troops stationed there, and other buildings, a town of very respectable size. The buildings, which are of stone, were constructed in the most thorough manner by the city under government authority. The premises are inclosed by a high stone wall, and the grounds are divided into regular rectangles by four avenues, intersected by four streets.

Through each building runs a series of cours, covered with a glass ceiling, and in these cours the slaughtering is done, the animals being dressed on wooden frames placed at regular intervals on each side of the cour. A peculiar feature of the business is that of blowing up the carcass as soon as the head and legs are cut off, which the *Commercial Bulletin* describes as follows: The body being placed on the dressing frame, an incision is made in the breast near the neck, and the nozzle of a bellows inserted. A man then works the bellows for about fifteen minutes, until the whole carcass is swollen out like a small balloon. The reasons given for this are that it makes the meat look better, more plump than it otherwise would, and that it enables the one who skins the carcass to get the hide off quicker and easier, without injuring it. All bullocks, calves, sheep, etc., slaughtered in these establishments are blown up in this manner.

Pig butchery in Paris is also conducted upon a novel plan. The pigs are taken into a large round house, having a cupola in the roof to let off the smoke, the floor being divided into triangular dens. A dozen or so of pigs are driven into each den at a time, and a butcher passes along and strikes each one on the head with a mallet.

After being bled, the defunct porkers are carried to the side of the room and arranged methodically in a row. They are then covered with straw, which is set on fire and the short bristles quickly burned off. After a thorough scorching the pigs are carried into the dressing room, hung up on hooks, and scraped by means of a sort of drawing knife, handled by a skillful operator, who performs his work at the rate of about one pig a minute. Then the bodies are washed and the entrails taken out and cleaned.

Every part of the animal is utilized in Paris, and that which the American throws away as worthless is made to subserve some use in the Frenchman's economy. The pig's blood is used in the manufacture of the large black sausages which meet with such extensive sale in Paris. The long bristles are pulled out by hand and go to the brush maker.

Regenerating the Potato.

The well known writer, Mayne Reid, has been experimenting with Mexican seed potatoes in Herefordshire, England, thereby doubling his crop and entirely escaping the blight which has been so fatal to the English and Irish potato crop of late years. He says, in a letter to the London *Live Stock Journal*, that for the last three years he has been cultivating seed which came direct from Mexico, with the result, that while ten other sorts, planted in the same field, tended with like care—in short, *ceteris paribus*—have all been more or less diseased, his Mexican "papas" show not a spot of blight. Nor is this all in their favor, for while the best of the other kinds have yielded less than five tons to the acre, they have produced over ten, in common drills done by the plow. Hundreds of specimens were above one pound in weight, some even a pound and a half.

After being stored in ordinary field pits through the winter the Mexican potatoes come out perfectly sound, and seem to improve in quality as the spring advances. As an article for the table he thinks they have no superior; and he proposes that his government take in hand the importation of Mexican and Peruvian seed as a cure for the potato blight.

Bonesilate.

A new material, called bonesilate, has been added to the manufactured products of Newark, N. J. Its basis is bone dust. It can be polished and colored, and is harder than celluloid. It is used for buttons, door knobs, billiard balls, and other articles now made of ivory and hard rubber.