

The plowmen are housed in thirty-five (35) cottages, most after the fashion of large estates in Europe. Six stables are built in different parts of the plantation, the central one two hundred feet long. When necessary over twenty double plows can be quickly assembled without deranging other regular operations.

They invent many, and make and repair all their own tools—plows, wagons, threshing machines, and seed drills, possessing complete shops and employing experienced mechanics.

Our engravings so perfectly picture the farm that they require no explanation. One there looks upon the land and buildings as they are. It has a prairie-like surface, marked out by permanent roadways into long parallelograms of from five to ten acres; no trees, no rocks, no interior fences, no waste room; constantly under cultivation, never any rest—thus this strain can only be met by liberal manuring.

Bloomsdale is a vast vegetable garden; but it is a garden only for the raising of seed: not a vegetable is sold; the plants mature; the seed ripens, and it alone is removed.

The first step in the work of successful seed raising is to secure the growth of well matured and healthy vegetables from which to produce the seed. This, of course, requires a rich soil and thorough cultivation, which is well understood and practiced at Bloomsdale. There is little of novelty or interest about this part of the business to such persons as are familiar with vegetable growing on a large scale. Everything on the farm is planted in rows, so as to admit of easy culture by running the cultivator and similar implements between them. A great variety of implements are in use, but the plow, harrow, and cultivator are the main dependence in the work of tillage. Of the *two classes of vegetables* from which seeds are raised, *annuals* and *biennials*, the former, among which are radishes, lettuce, etc., give generally least trouble, as the seed can be obtained from them in four to five months. The tomato, however, which is an annual, is rather an exception, on account of the great amount of labor required in separating the seed from the pulp, to which more particular reference will be made hereafter. Among the biennials is cabbage, which requires about fifteen months from the time of planting until a crop of seed is obtained. Cabbage, and also beets, carrots, turnips, have to be kept over winter, to be planted for seed the following spring. There is often a great loss sustained in this way; in some cases a large part of the crop of cabbage decays and becomes worthless during the winter. It is, therefore, necessary, to have a much larger area planted the first season for raising the heads than is expected to be taken up for the production of seed the next spring. This year the firm have planted on their various farms 350 acres with cabbage for the raising of seed heads. They commence setting out the plants about the first of July, and continue during August. The implement used in planting the cabbage is the dibble, well known to all gardeners. With this an average man can put 9,000 plants into the ground in a day. The time required to secure a crop of beet seed does not vary materially from that necessary to obtain it from cabbage, and the same is true of several other vegetables of a similar character.

The seed harvest is now in active operation on Bloomsdale. Several of the earlier crops have already been gathered. The first one taken in is corn salad. This is followed by the gathering of the turnip crop, with which 135 acres of ground were planted. The crop of cabbage seed has also been gathered. The seed from 40 acres of spinach has been harvested. The crop of parsnip seed this season amounted to nearly 400 bushels. Last week the harvesting and threshing of the crops of beet and onion seed were in progress. Thirty-five acres were planted with beets and fifty with onions producing seed this season. The sickle is the implement generally employed in cutting the ripened plants containing the seed. As the seed stems are cut off by the reapers they are carefully placed in piles on large square sheets of canvas. The four corners of the canvas are then drawn together, and the bundles of seeds are placed on wagons and hauled to the barns or drying houses, of which there are fifteen. In addition to the threshing floors, they are fitted up with a succession of scaffolds of boards, arranged a short distance apart and placed one above the other at suitable distances, on which the seed, if wet when cut, is placed to expose it to the air to dry it for threshing. The extent of drying surface afforded by these buildings is four acres of ground. Some of the seeds, among which are Lima beans, are threshed with the flail, the rest are run through machines similar to our ordinary threshing machines, varying in their internal arrangement to suit the different kinds of seeds to be threshed. They are propelled by steam, and for this purpose *five engines* are employed on the various farms. One of these is an eighteen horse power stationary engine. This is used for threshing, for grinding corn and other feed for stable use, and for grinding fertilizers.

The harvest season begins about the first of June and continues till the middle of September. During this period one, and sometimes all five, of these engines are constantly at work. The work of separating the seed from the hulls or chaff which remains after the bulk of the straw and refuse material has been removed during the process of threshing, is performed by the ordinary grain fan, or machines constructed on the same principle. These are variously arranged so as to adapt them to the different size and weight of the seeds that are to be cleaned. During our visit some of the workmen were engaged in the large main barn, in the middle

of the farm, in putting the finishing touch on a portion of this season's crop of parsnip seed, already alluded to. On one side of the barn floor was a huge pile of the raw material just as it remained after threshing. This was being shoveled into the hopper of the fan by one of the men, in the manner of oats or wheat, and from the machine, which was turned by another person, the seed ran out nicely cleaned. On the other side of the floor there was a heap of the pure seed, which would open the eyes of the person who, in his observation of seed growing, has not gone beyond the small ten cent papers of the articles that come from the warehouse in Philadelphia.

After the seed is threshed and dried it is put up in sacks of convenient size for handling, and part shipped to the warehouse in Philadelphia, the rest deposited in storehouses on the farm. The storehouse for small seeds is a large fire-proof building, 210 feet long by 40 wide, and three stories high. There is here an apartment devoted to putting up seeds in packets. Here girls are employed in filling the small papers familiar to all, and which have been previously labeled for the retail trade. When filled and sealed up they are tied together in bundles of a dozen packets each. They are then packed in bins and held subject to orders. A large part of the work is performed at the warehouse in Philadelphia, to which large quantities of the seeds are forwarded as soon as they are ready for sale. Sales are made in the city, and all correspondence there attended to. Great care is employed in planting, cultivating, and threshing, to keep each kind of seed and the several varieties of the same sort separate. To prevent hybridization among so many varieties of plants, extended areas of land are necessary and careful calculations as to the location of crops.

Among the crops to be harvested are thirty-five acres of radishes, now almost ready for the sickle, and the remnant of forty acres of onion sets. There are also thirty-three acres of Lima beans, in addition to which there are large areas out on contract. The quantity of peas and bunch beans annually sold by the firm amounts to about seventy car loads.

The storehouses used as drying-houses for unthreshed seeds in summer have floors capable of sustaining any weight, and in winter furnish warehousing space of vast extent. In them are stored heavy and bulky seed, such as peas, beans, corn, beet seed, onion sets, etc.

The tomatoes, now growing for seed, cover an area of fifty acres. It requires *thirty thousand bushels* of this vegetable to produce enough seed for their yearly sales. As they ripen the tomatoes are pulled off, put in barrels, and hauled to the Delaware for the purpose of washing out the seed. They are first mashed in the casks with stamps until well broken to pieces; this mass is then put into coarse wire sieves working in water; these are of sufficient size to allow the seed and smaller portions of the pulp to pass through into a box prepared to receive them, leaving the larger pieces of the tomatoes in the sieve to be thrown away. The seed and finer particles of pulp are then put into a finer sieve, by which another portion of the pulp is got rid of. This is continued with successive sieves of a finer grade, until the last is reached, which is of just the right size to retain the seed and allow the remaining portion of the pulp and useless matter to pass through. All that is required to complete the operation is to dry the seed, when it is ready for the fan.

Six or seven acres are taken up with peppers. About two thousand bushels of these are necessary to supply the yearly wants of the establishment. There are now forty-five acres of beets growing on the farm for seed in April, 1883, with about the usual proportion of the other biennial root crops under cultivation for the same purpose.

Corn, potatoes, and the common grains and grasses are not raised on the farm. Such of these as are wanted for seed are grown by outside parties, under the supervision of the firm. Only the tender plants, and such as require a long season to mature, are started under glass, but these are of sufficient amount to require sash enough to cover more than an acre of ground.

To us the most interesting part of the farm was the "*trial ground*," covering three acres.

"The entire list of vegetables from A to Z is here on trial, not one sample of each, but comparative lists of sometimes two hundred of each sort. Samples of their own, samples from the counters and seed lists of American seed merchants, samples from Canada, England, France, Holland, Germany, Italy, all classified, ranged side by side, and numbered consecutively from one up into the thousands.

"Two hundred and fifty trials of peas, one hundred and thirty of turnips, one hundred and fifty of cabbage, one hundred and ten of mangolds and beets, fifty of sugar corn, one hundred and sixty of beans, and so on to the end of the chapter.

"Neatness, next to the unexpected display of numbers, was the striking feature; the land was laid out in parallel beds, two hundred yards long and six feet wide, with paths between. Across these beds were sown the seeds on trial, four to five rows of each, and upon the entire area not a hatful of weeds.

"Each family of vegetables is planted the same day and under precisely the same circumstances, each trial distinguished by a label bearing specific numbers; these recorded in a book giving date of planting and origin of sample. Into this book, at proper periods, four series of observations are recorded bearing upon vitality and habit.

"The books of record are volumes of practical systematic observation, and may be seen in the office stacked away, ex-

tending far back into the years; ready at all times to testify to the merits or demerits of every vegetable known to the trade."

This is the science of our times, when most is learned by experiment, extended over a long period of time and numerous tests. All conditions and disturbing causes are taken into account, and in this case the whole history of the growth and characteristics of the plant are discovered by means of the comparative method. They know the history and quality of what they sell. The trial ground is at once a "sample room," a "register" of kinds of stock, a "laboratory," a record of kinds sold, with dates and particulars.

The "packing room," to which the seeds are taken, packed, and stored, is two hundred and ten feet long. It is kept clean, dry, well ventilated, at a uniform temperature, and possesses the sweet odor of the harvest. The seed is primarily measured into grain bags and hung up in rows. This is done to avoid the tendency, when stored in large compact masses and consequently away from free circulation of air, to heat, and become mouldy.

In small quantities and for retail sales, seeds are filled into little paper packets, with label, address of the firm, and colored illustration of the plant. These bags are filled by hand, and it is a singular fact that, after numerous attempts, they have, up to the present time, failed to invent a machine to do the work as well. We are tempted to suggest to some of our subscribers to try their inventive skill on the subject.

The girls, however, fill them with wonderful rapidity and accuracy. It is said that any selected at random out of the fourteen or fifteen millions will not perceptibly vary in weight.

Bloomsdale Farm, with its immense annual production of "pedigree seeds," is known to every agriculturist. Landreth & Sons have done more to improve the taste for fine vegetables than any other parties in the Union, and from the manner in which the firm goes steadily forward, yearly increasing the shipments by tons upon tons, their future will be still more remarkable success than their past and present. Next year they complete their one hundred years. We trust they may see a second centennial.

DECISIONS RELATING TO PATENTS, ETC.

United States Circuit Court.—District of Connecticut.
MEYER et al. vs. GOODYEAR'S INDIA-RUBBER GLOVE MANUFACTURING COMPANY.—PATENT RUBBER SHOE.

Shipman, J.:

This is a bill in equity to restrain the alleged infringement of reissued letters patent granted to the plaintiffs on November 17, 1874, for an improvement in India-rubber shoes. The original patent was granted to Christopher Meyer and John Evans, as inventors, on February 21, 1871, and was reissued to the same persons on July 16, 1872. Infringement is not denied.

The claim in the patent was for—

"One or more transverse ribs in rubber shoes or sandals, formed by thickening the substance itself in the lines or directions thereof while in the sheets, by means of rolling dies, as and for the purpose described."

Before the invention the edges of the mouth of the shoe were strengthened and made to present a finished appearance by being turned over by hand and cemented. Sometimes cords or strips of rubber were placed by hand upon the edge and were cemented. As a part of the invention, but not included in the original specification, claim, or drawings, the inventors ribbed the edge of the mouth of the shoe with a rib formed in the manner which has been described. The first reissue was obtained for the purpose of including this rib within the patent.

The claim was as follows:

"As a new article of manufacture India-rubber shoes with strengthening or other ribs homogeneous with the substance of the body, formed by thickening up the said substance in the forming of the sheet, substantially as specified."

The validity of the first reissue was then tested in this circuit in the case of *Meyer v. Pritchard*, which was tried before Judge Blatchford (12 Blatchf., C. C. R., 101). The court held that there was no patentable novelty in the invention in view of the patent granted to Silas C. Hyatt and Christopher Meyer, January 17, 1854.

The first and third claims of this patent were as follows:

"1. Producing a shoe sole or other analogous manufacture in India-rubber or gutta percha in one piece, having variety of thickness in its different parts, by the use of rollers whose surfaces present the reverse of the forms to be produced at a single operation, substantially as herein described.

"3. We also claim such soling or analogous manufacture in continuous sheets, at one operation, by rolling, as described."

The present reissue was thereupon granted, in which the claim is limited to the rib around the mouth of the shoe, and is in these words:

"As a new article of manufacture, India-rubber shoes having a strengthening rib around the top or mouth of the shoe (whether with or without similar ribs on other parts of the shoe), formed not by turning over the edge or lapping one piece upon another, but thickened up from and homogeneous with and forming a part or portion of the body of the upper, substantially as specified."

Divers defenses are set up in the answer. The two which are relied upon are the invalidity of the reissue, because it is for a different invention from that described in the original patent, and lack of patentable novelty in view of the Hyatt and Meyer patent of 1854.

The court now holds that this second reissue is invalid, and for the same reason given on the trial of the first reissue, namely, double use, as shown by the Hyatt and Meyer patent of 1854.

The decision in *Meyer v. Pritchard* upon the reissue then before the court to the effect that the alleged invention covered thereby of forming thickened ribs in rubber shoes or sandals by rolling was but a double use of the invention disclosed in the prior patent to Hyatt and Meyer—viz., forming the soles of rubber shoes of different thicknesses by rolling—*Held* to govern this case, the present reissue only differing from the former in being specifically limited to ribs around the mouth of the shoe.

A reissue may include matter shown in the model which was not described or indicated in the original specification or drawing; and it seems that the character of a lost or destroyed model may be established by oral testimony.

Argument against the propriety of holding that the claim of the present reissue was not patentable by reason of the earlier patent is argument against the propriety of the decision which was made in the *Pritchard* case.

The bill is dismissed.

United States Circuit Court.—Southern District of New York.

GARDNER et al. v. HERZ et al.—PATENT CHAIR SEAT.

Wallace, J.:

This action is brought to restrain the infringement of Reissue Letters Patent No. 9,094, dated February 24, 1880, granted to the assignee of George Gardner for an improvement in chair-seats.

Reissue Letters Patent No. 9,094, for a chair-seat made of laminæ of wood glued together, with the grains in one layer crossing those of the next, concave on the upper surface, convex on the lower surface, and perforated, examined and found to present no patentable novelty over the patent to Mayo, granted December 26, 1865.

Merely giving the well known concave or dishing shape by an old process to a chair-seat formed of the materials covered by the Mayo patent is not invention. It is merely applying a process that is old to a material that is old to obtain an old form.

United States Circuit Court.—Southern District of New York.

COBURN et al. vs. SCHROEDER et al.

Wheeler, J.:

This cause has now been further heard upon motion of the defendants to have the decree opened and leave granted to put in as further defenses to the patent an English provisional specification, left by James Ritchie Butchard, January 23, 1866, at the office of the Commissioner of Patents in England, with a petition for a patent, and other evidence of prior knowledge and use. The invention is understood to have been made in February, 1866.

Motion to have a decree opened and leave granted to put further defenses to the patent denied where it appeared that the new evidence would not affect the result.

An invention is not patented in England, within the meaning of the third division of section 4,920 Revised Statutes, until the completed specification has been filed.

An English provisional specification is not a bar to the grant of a patent in this country, and when relied on as a printed publication under section 4,920 Revised Statutes it seems that the defendant must show that it was actually published before the date of the patentee's invention.

Motion for opening a decree on account of an alleged change of issue made by the filing of a disclaimer by the patentee, denied where it appeared that the effect of the disclaimer was merely to limit the claim of the patent and the issue, and where the parties had full opportunity to try, and diligently availed themselves of the opportunity to try, the question which would be open if the case should be again opened.

United States Circuit Court.—Southern District of New York.

HOLLIDAY et al. vs. PICKHARDT et al.—PATENT 250,247.—ROSAINE COLOR.

Blatchford, J.:

On a motion for a preliminary injunction, question being raised whether the patentee's description would make the product claimed by him, and it appearing that this point was decided in favor of the patentee by the Patent Office on a direct issue between him and another patentee whom the defendants represented, *Held*, for the purposes of the motion, that the product claimed could be obtained by following the description of the patent.

The successful party to an interference is entitled to preliminary injunction against the representatives of the defeated party in case the infringement is clear, and the decision of the Patent Office in an interference between the parties as to the identity of the products sufficient proof of infringement.

Nathan Rixford.

Mr. Nathan Rixford died in Hartford, Conn., August 29, at the age of sixty-seven. He was, at his death, probably the oldest living representative of the silk culture and manufacture in this country. He started the first silk manufactory in Mansfield Hollow, Conn., where he was a manufacturer for more than thirty years.

Correspondence.

Balsa of Lambeyeque.

To the Editor of the Scientific American:

The Indians of Lambeyeque, Peru, use a canoe called the lambyeque balsa, which I believe would go over Niagara Falls with perfect safety. It will dance on the top of the highest wave or even spray when the wave breaks into foam, and is impossible to submerge or upset except for a moment; its material, being two bundles of reeds, lashed together longitudinally, and its peculiar shape rendering it secure against either mishap. It is broad in the center and tapering at each end, with the bow turned up like a skate. If turned upside down this curved bow will point downward in the water, and being composed of hollow reeds the least motion will make it seek the surface and throw the balsa on its beam ends, which position it could not maintain. The center width being double its thickness, it will immediately right itself. It is amusing to see one forcibly held in an inverted position and then released; the instant restraining power is removed, it will turn upright in the fraction of a second. Between the two bundles of reeds there is a hollow space covered with water-tight skin. In the Peruvian balsa this space is small, but it might be made large enough for a man to lie



down in. In the case of going over Niagara Falls (supposing any one was foolhardy enough to attempt it), a line might be attached to the bow and extend to the shore below the Falls, in order to draw the navigator ashore after his descent. A dog recently went over the Falls without being killed, and in 1829 (I think that was the date) the famous ship Niagara was sent over, having on board two bears and a quantity of geese. The geese took flight when the ship went over and alighted in the river below; one of the bears was never seen afterward, but the other swam ashore below the falls with a broken leg. The ship itself was completely demolished. So the transit is not certain death.

To convey a better idea of these Peruvian balsas, I subjoin a sketch. W. B. W. Milwaukee, Wis.

True Disinfectants.

Many a so-called disinfectant is employed to-day in a certain solution, when it does not possess any value whatever under the circumstances. If it is really our intention to disinfect wounds, we must be certain, at least, that we will achieve our object with the remedy we use; if such is not the case, we only irritate without doing good.

The Imperial Board of Health in Berlin has published a number of experiments which have been made by Dr. R. Koch, with the view of establishing the real value of many so-called disinfectants. It would lead us too far to give the whole procedure employed to ascertain the facts mentioned, and we will, therefore, confine ourselves to giving the more important results of the investigations of this celebrated physician.

Most surgeons have been satisfied to wash their hands and clean their instruments with a 2 per cent solution of carbolic acid. Such a solution is almost inert, and a 5 per cent solution is necessary to achieve the desired object.

But what is the most interesting is the fact that *carbolic acid dissolved in oil or water proved itself totally inert!* What do our surgeons who still make use of so-called carbolic oil say to that? Koch found that carbolic acid, when dissolved in oil or in alcohol, had not the slightest influence on the vitality of any of the micrococci or bacilli.

Concerning sulphurous acid, it was found to be powerless against spores; bacilli and micrococci, when exposed to the fumes in a box, were killed within twenty minutes, but were very little influenced, or not at all, when exposed to the fumes in a room at the usual temperature.

Chloride of zinc showed itself just as harmless. A 5 per cent solution exerted absolutely no influence on the spores of anthrax, notwithstanding the same had been exposed to the action of the remedy for a period of thirty days.

Of other drugs, the spores of the bacilli were killed by chlorine water, fresh prepared; 2 per cent bromine water, 1 per cent aqueous solution of corrosive sublimate, 5 per cent solution of permanganate of potassium, 1 per cent osmic acid, within one day; formic acid, four days; oil terebinth, five days; solution of chloride of iron, four days; 1 per cent arsenious acid, 1 per cent quinine (water with muriatic acid), 2 per cent muriatic acid within ten days; ether within thirty days.

Inert or possessing very little influence: distilled water, alcohol, glycerine, oil, sulphur-carbon, chloroform, benzol, petroleum-ether, ammonia, concentrated solution of common salt, bromide and iodide of potassium, 1 per cent; sulphuric acid, sulphate of zinc and copper, alum, 1 per cent; perman. of potash, chromic acid, the chromates and bichromates, chlorate of potash, 5 per cent; boracic acid, 5 per cent; acetic acid, 5 per cent; tannic acid, 5 per cent; benzoate of sodium, 5 per cent; quinine (2 per cent in water 40, alcohol 60), iodine (1 per cent in alcohol), thymol

(5 per cent in alcohol), salicylic acid (5 per cent in alcohol, 2 per cent in oil).

As regards remedies which prevent the further development of spores, the following results were obtained. The first number means retarding the development, the rest totally preventing it:

Corrosive sublimate,	1 : 1,600,000	1 : 320,000
Oil of sirapiss,	1 : 330,000	1 : 33,000
Arsenite of potash,	1 : 100,000	1 : 10,000
Thymol,	1 : 80,000	
Oil terebinth,	1 : 75,000	
Hydrocyanic acid,	1 : 40,000	1 : 8,000
Oil of peppermint,	1 : 33,000	
Chromic acid,	1 : 10,000	1 : 5,000
Picric acid,	1 : 10,000	1 : 5,000
Iodine,	1 : 5,000	
Salicylic acid,	1 : 3,300	1 : 1,500
Permang. of pot.,	1 : 3,000	
Muriatic acid,	1 : 2,500	1 : 1,700
Camphor,	1 : 2,500	
Eucalyptol,	1 : 2,500	
Benzoic acid,	1 : 2,000	
Borax,	1 : 2,000	1 : 700
Carbolic acid,	1 : 1,250	1 : 800

But as, for purposes of disinfection, the micro organisms must be killed, and in the shortest possible period, and the effect of retarding the development of the spores (antiseptic) is not sufficient, only the following remedies can, according to Koch's experiments, be said to be of value: corrosive sublimate, chlorine, bromine, iodine. Bromine in form of vapor is, as concerns rapidity of action, superior to chlorine and iodine. — *Med. and Surg. Rep.*

National Telephone Association.

The National Telephone Exchange Association held a convention in Boston, September 5 and 6. The committee on Central Office System and Apparatus Exchange Statistics reported that reports had been received from eighty-one exchanges, representing some 29,000 subscribers. There are about 60,000 to 70,000 subscribers in the United States. In New York there are 2,873, and the smallest number in any one place is 10. There is a steady and continued growth all over the country. The number of connections increase each month at all localities with improved service.

In an informal discussion of line construction and maintenance, Mr. E. S. Babcock, of the Evansville (Ind.) Telephone Exchange Company, gave an interesting account of 400 miles of wire maintained by his company and worked successfully without insulators of any kind, by simply attaching the wires to the poles. He said no difficulty was experienced in sending messages, and it was found that the wires thus situated worked better than those insulated.

W. D. Sargeant, of Brooklyn, from the Committee on Electrical Disturbances, read a comprehensive paper treating of three subjects—leakage, induction, and earth and atmospheric currents—saying that the increasing number and length of wires prove the value of good insulation and conductivity. No loose or unsoldered joints should be tolerated on a telephone line. The great enemies to long lines are induction and retardation. The latter appears to be the most difficult to remove. In so-called anti-induction cables retardation is most manifest. When inductive shields entirely inclose the insulated conductor the metallic current appears to remove much of this trouble. A cable, the longest in this country, has been recently laid from Newark, N. J., to Jersey City, some ten miles. The conductors in this cable change their relative positions at every joint of about 1,000 feet, and the remedy seems to be effectual, conversation on a single grounded circuit being carried on without interference with others, and the sound of several Morse wires working from batteries and dynamos was scarcely audible. As to earth and atmospheric currents, it is believed that with well-insulated lines of non-magnetic material a degree of perfection may be attainable that will leave but little to be desired.

There were present at the several sessions representatives of principal exchanges throughout the country, and quite a number of practical papers were presented.

The National Geological Survey.

Hitherto the surveys conducted by United States geologists have been confined to the Territories. Last winter Congress authorized the prosecution of such work at national expense within the lines of the States. Accordingly parties are now at work in North Carolina, Kentucky, Missouri, and Arkansas, under the direction of the Chief of the National Survey, Professor Powell, obtaining data for a geological map of the entire country. Meantime the territorial surveys are not neglected, Professor Powell going to join the large party at work in Arizona and New Mexico. The Bureau of Ethnology has several parties at work in the Mississippi Valley.

National Museum of Hygiene.

Surgeon-General Wales, U. S. N., describes, in an official circular, the scope and plan of the National Museum of Hygiene, organized under the Bureau of Medicine and Surgery, at Washington. The design is to make the collection one that will illustrate the entire scope of sanitary science, to have courses of lectures by capable sanitarians from all parts of the country, and to establish a library of sanitary science, accessible to all engaged in the study of this branch of knowledge. The library of the Bureau already contains many standard works in English, French, and German. The support of the Museum has been provided by act of Congress.