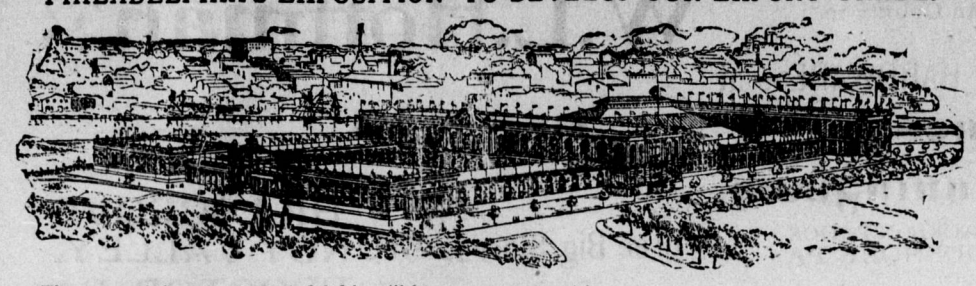
PHILADELPHIA'S EXPOSITION TO DEVELOP OUR EXPORT TRADE.



The event of the year in Philadelphia will be an export exposition.

This is the first show of the sort ever held in the United States. It follows appropriately the expansion of Uncle Sam's territory and the necessity which is now laid upon him of seeking foreign trade development.

Of the numerous National and International Expositions projected for the next three or four years in different parts of the United States, the one to be held in Philadelphia in September, October and November of the present year is in many respects the most important to the commercial interests of the country.

The Philadelphia Exposition of 1899 is an exposition for the development of American manufactures and the expansion of our export trade, and it will be the first national exposition of that character ever held in this country.

Of recent years, expositions of goods suitable for export have been held at frequent intervals in the great manufacturing countries of Europe, attracting foreign buyers and greatly aiding export trade. It is the purpose to exhibit at next fall's Exposition every line of manufactured products of the United States especially suitable for export. Such exhibits will form the principal department of the Exposition and will comprise everything which is, can or might be exported, from locomotives and heavy machinery to the smallest novelties.

The Exposition will be under the joint auspices of the Commercial Museum and the Franklin Institution of Philadelphia, and its exhibits will be confined to articles especially suitable for exports. It will open in September and continue through November.

The main group of buildings, covering at least 200,000 square feet of Exposition space, will be on the west side of the Schuylkill River, fifteen minutes's ride from the City Hall. Besides this there will be smaller buildings for agricultural machinery, locomotives, railway and street cars and plenty of space for a subdued Philadelphia Midway.

Mr. P. A. B. Widener, the street car man, is President of the Exposition Association, and the directors include many well-known Philadelphia business men.

In October a commercial congress will be held in the assembly rooms of the Exposition Buildings, which will be attended by delegates from the leading Chambers of Commerce of the world. Probably eight hundred representatives of foreign firms will attend its sessions.

The department of manufactured products of the United States will occupy four-fifths of the Exposition space, and will show everything from locomotive and stationary engines to the smallest "Yankee notions."

An important part of the Exposition will be the exhibit showing how goods must be put up in packages of convenient size, shape and weight to be transported upon mule back in countries where there are no wagons or railways.

THE PEACE CONFERENCE AT THE HAGUE.

The building in The Hague which Queen Wilhelmina, of Holland, has placed at the disposal of the Czar's Peace Conference is her palace known as the "Huis ten Bosch" ("House in the Wood").

The Orange Room has been selected for the sittings of the members of the conference. It is a great room, lighted by a glass cupola fifty feet above the floor.

There will be three sections to the conference, each with a task of its own. The general subject will be di-

BARON DE STAAL, PRESIDENT OF DISARMAMENT CONFERENCE.

vided into three parts. The first will touch the question of disarmament, that is, to what extent the armies shall be reduced. Questions concerning international arbitration will be decided by the second, while all germane questions will be dealt with by the third.

The palace itself is artistically interesting. It was built in 1647 by the Princess Amelie de Solmi, widow of Prince Henri Frederic, of Orange. Paintings in the Orange Room are by such great artists as Levens, Jordaens and Van Thulden. There is an allegorical picture representing his victory over wicked temptations. There is a Chinese and a Japanese room, with rarest works of art in them. The walls of the dining room are decorated by De Wit with scenes from mythology.

Among the people who will be present at the conference, though not as a delegate, is the Baroness von Suttner. She is the author of a novel with the title "Lay Down Your Arms." This book is said to have had great influence with the Czar in issuing his Peace rescript. It is said, moreover, to have been the greatest single force with him to that end. It ran through a dozen editions on the continent, and the men of the military countries were thoroughly familiar with it, strangely, before it could find an English translator or a publisher in England.

Conference, ultimately leaving for Leyden, where they will entertain the Conference twice, at a dinner and a garden party.

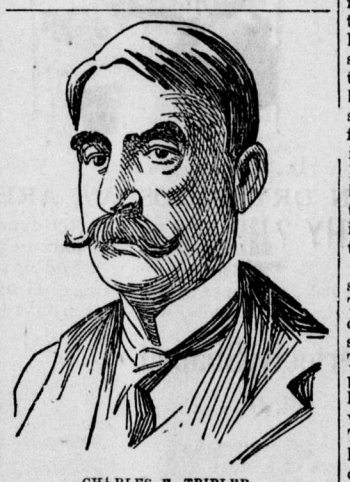
The Rotterdam Peace Committee has obtained in a fortnight 15,000 signatures to a peace petition.

Baron de Staal, Russian Ambassador to England, who is to preside over the international disarmament conference at The Hague, will be assisted by Professor F. de Martens, the Russian privy councillor. Professor de Martens is the permanent member of the foreign affairs ministry and one of the arbiters in the Venezuela boundary dispute. The United Kingdom of Great Britain and Ireland is represented by Sir Julian Pauncefote, the British Ambassador to the United States.

TRIPLER'S TESTS WITH LIQUID AIR.

The boundless possibilities of the twentieth century through an unlimited and cheap supply of power to do the work of the world were suggested when Professor Charles E. Tripler, of New York, gave an exhibition of his experiments with liquid air before the National Geographic Society at the Arlington, in Washington. These experiments, when made, filled the company with wonder and seemed to set all preconceived notions regarding heat and cold, aside in the light of knowledge that has been acquired of late years, and which is rapidly being so perfected as to revolutionize present methods of doing many things, if the expectations now entertained in regard to them shall be eventually realized.

Mr. Tripler began his exhibition by



CHARLES E. TRIPLER.

dipping a pan of liquid air from the reservoir. It boiled and steamed away as water from the fire, yet it was cold and not heat that was creating the commotion. Spilled to the floor, it landed with a heavy sound, like the

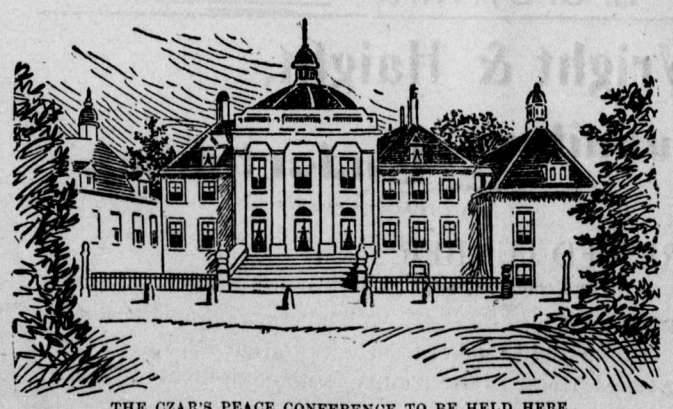
fuls of the liquid were passed around. Fingers passed through the substance gave a sensation similar to passing through heavy vapor, yet there was the heavy liquid, as clear as water, with a vapor arising from it. If passed through the liquid rapidly the hand experienced no intensity of cold, but if allowed to remain there a few seconds an icy chill would be experienced, and more extended contact would freeze the flesh and bones, until they could be broken up with a hammer, as a brittle stone would be crushed.

The experiment of making ice over a fire was perhaps the most strikingly illustrative of the power of liquid air. Mr. Tripler took a kettle, filled it with the liquid, and it began to boil. He placed it on a gas stove so that the flame could play upon the bottom of

ICE ON A KETTLE OF LIQUID AIR OVER A GAS STOVE.

the vessel. The heat but intensified the cold, as it accelerated the liquid in turning into gas. Ice water poured into this kettle still further increased the process, for it was comparatively hot water. The kettle boiled and sent a stream of steam aloft to a distance of six or eight feet. No housekeeper has ever seen her kettle boil so. All this time the water was being frozen within the kettle and beneath it in the flame was a covering of frost. It was no ordinary ice, either, for, later, on being allowed to rest on the table and passed around, the intensity of its freezing kept it firm a long time, in spite of the heat of the room.

The concluding test was in some respects a most wonderful one. Mr. Tripler placed liquid air in a deep tin cup, lowered it in a jar of water and soon had a thick coating of ice on it. The liquid air turned into gas. He put ice water in the cup to relieve the hold of the ice on the tin cup, and when removed he had a cup of ice. This ice cup in turn he filled with liquid air, and then lowered a piece of carbon in it. A bright light was the result, showing through the ice glass as an arc light through a globe. The carbon was burning with a heat of 3000 degrees above zero, and it was burning emersed in a liquid with a temperature of 340 degrees below zero, and yet the experimenter held the cup in one hand and the end of the carbon in the other, the intense cold preventing danger from heat so great as to be beyond the power of the mind to comprehend it.



THE CZAR'S PEACE CONFERENCE TO BE HELD HERE.
[It is Queen Wilhelmina's "House in the Wood," and was built in 1647. It is a palace full of historic associations.]

Her Majesty Queen Wilhelmina and the Queen Dowager are now on a Continental tour. They will return to The Hague to receive the Peace

striking of mercury, and yet in a moment it had turned to air, and was being breathed by the people who had just seen it fall in a solid state. Cup-

The Joke on Papa.

It is told of a learned professor of languages in an English university that on one first of April he was asked to bring home several things from the druggist's. He carefully made a memorandum of the articles so that he might not forget, and was putting his list in his pocket when his saucy young daughter said, quite coolly, "Papa, will you bring me a penny worth of evaporated pigeon's milk?" "Certainly, my dear," was his reply, as he carefully noted it down, and doubtless he would have asked the druggist for it had not one of the children laughed. That caused him to look at the entry, and he, too, laughed. "You caught me that time, my dear," he said, patting his daughter's curly head.

The per capita cost of maintaining convicts at the Michigan prison is 38½ cents a day, and the average daily earnings are 35½ cents.

BISMARCK'S TOMB.

Sarcophagus in Which the Remains of the German Prince Will Rest.

With the single exception of Bismarck's Autobiography, the greatest success ever achieved by any publication in Germany was a pamphlet by Professor Quidde, entitled "Caligula." This pamphlet had, however, from a publisher's point of view, everything in its favor. Its very title savored of the sensational, and the German-reading public knew beforehand that "Caligula" was in reality a comparison of the insane Roman Emperor with the present Kaiser.

Put on sale at the extremely low price of ten cents, it took the pamphlet eighteen months to sell 500,000 copies.

To know how far, comparatively speaking, the sale of Bismarck exceeds that of "Caligula," it is only necessary to know that 318,000 copies of the former had been ordered before the book was published. The fact, too, that the price of the Iron Chancellor's autobiography was twenty marks, or nearly fifty times the cost of "Caligula," makes the comparison all the more striking. When a German parts with twenty marks he wants a run for his money, and also must know all there is to know about a book before he buys it. It is self-evident, then, that the German people have accepted Bismarck's story as the only true and adequate expression of the Iron Chancellor and his influence on European history. It is interesting also to notice its reception in other countries. The rights in the United

SARCOPHAGUS FOR OTTO VON BISMARCK.
By Courtesy of Harper & Brothers.

States were secured by Harper & Brothers, and the book throughout America is considered the most valuable contribution to European history that has been made for many a day. In England it has also had a sale commensurate with its importance. Another fact of especial interest about this book is that although it was published on November 29th, it has already appeared in five different languages. France did not express much approbation over the autobiography of Prince Bismarck. It contained too many references to Sedan, to Gravelotte and to the siege of Paris for her tender sensibilities. Russian sensibilities have proved still more tender, and the Imperial Press Censor has refused Russian booksellers permission to place the work on sale. There are many subjects which Bismarck treats with a plain-spokenness that is most painful to the delicately organized ear of the Russian; for instance, Bismarck speaks of the murder of the Czar Paul; the Russians speak of it always as the "sudden demise."

It is indeed unfortunate that the Iron Chancellor did not live to enjoy the success of his book. It is a sure sign that throughout his misfortunes, throughout the bitter years of his old age, his people still believed in him. It is to Bismarck's credit that his autobiography is neither pettish nor pessimistic, and it is safe to say that the best monument to his memory will be half a million copies of his book in as many German homes, and as many more copies scattered throughout the world. A man who has such a monument need care but little what marble mausoleums are raised above his ashes, or in what sarcophagus he sleeps. Our illustration shows the sarcophagus of Prince Bismarck, which lately arrived at Friedrichruh, and which has been placed in the newly built mausoleum. It is made of pink marble from the designs of Herr Schurbach, of Hanover, and is in the strictly Roman style. Its dimensions are ten feet long, five broad and fifty-one and three-quarter inches high.

Rigging For Trotters.

The multitude of appliances brought into use from year to year for the purpose of improving the speed of the trotting horse surprises the man who remains away from the harness-racing courses for a few seasons, and the vet-

THE PACER EXPLOIT,
Rigged with Chin Check, Two-Minute Harness, Rein Holders, Galting Pole, Hopples, Knee Boots, Shin Boots, Quarter Boots and Ankle Boots.

eran who saw Lady Suffolk, Flora Temple and other champions in the early days of the sport is reminded that this is the age of invention.

Toe weights are by far the most common of all artificial appliances used to improve and correct defective action in the trotting horse. They are used for a multitude of different purposes.

FOR FARM AND GARDEN.

Why Varieties of Grain Run Out.

The horticulturist of the Michigan station claims that one of the principal reasons why varieties of grain run out is probably that oats, wheat and barley are being continually inbred in nature, and the result is that, like animals, their vigor and productiveness decrease, unless the seed be very carefully selected each season, which is not often done. The different varieties of wheat, barley, oats and pease probably never cross naturally in the field. The flowers are so protected that it is next to impossible for foreign pollen to reach them; hence, if new blood is to be infused into a variety it must be done by artificial cross fertilization. This cannot be done until the head is carefully examined, the flower found, and the male and female organs distinguished.

Sow Plenty of Clover Seed.

The farmer who would keep up and ever be increasing the fertility of his land cannot well sow too much clover seed. As the seed is generally a rather expensive article it becomes an important, and in some seasons, a somewhat difficult problem. In general, early sowing is best, especially if the ground is heaved or honeycombed with frost, as the seed will be well covered and thus protected from the late spring frosts. If sown late the ground should be harrowed, even if it is in wheat, with a light slope-toothed or common spike-toothed harrow, as both the wheat and the clover seed will be greatly benefited by the operation. Sow plenty of seed—ten pounds to the acre is not too much, and if you do not harrow, it will pay to sow at different times, some early and some later, cross sowing it.

Where clover sown last spring is much lifted, or "spewed," as a great deal of it is this spring, the best treatment is to reseed the ground heavily with a mixture of red clover and crimson clover seed, and sow upon it some good brand of commercial fertilizer at the rate of 200 pounds to the acre. This will secure a good stand and cause the crimson clover to mature and be ready to cut along with the red clover not frozen out. It will also bring forward the young red clover and give it sufficient vigor and growth to carry it through the next winter and secure a heavy crop the next year. Wherever there is a field with spots of poor soil on the surface, special pains should be taken to so enrich them before seeding to clover as to secure a good stand and a heavy growth.—New England Homestead.

Raising Turkeys.

After the first laying is completed, confine the turkey hen in a clean place with plenty of food and fresh water. In a short time she will forget her inclination to sit and be ready for another laying. Some successful breeders have their turkeys lay three times during the summer and allow them to rear the last brood. For a common hen, nine eggs are sufficient for a sitting. Throw a handful of lime or sulphur in the bottom of the nest. This will drive away mites and the gray louse. As a rule turkey eggs hatch well. The first dose that my little turkeys receive is a pill in the shape of one whole black pepper. Each little mouth is forced open and the pepper pressed down.

The first food for young turkeys is Dutch or cottage cheese and their first drink the whey which is strained from the curd. Many people think the making of this cheese is quite a task, but it is in reality very simple. Let the curd strain through a colander and feed a little at a time at intervals of not more than one and one-half hours. This should be their sole food for two or three days. After this the diet may be changed to stale bread, soaked in whey or buttermilk. Boiled eggs are also valuable. The cheese, however, should be the principal food until the fowls are a month old. An addition of a little pepper and oil cake meal is desirable. Corn meal in any form is almost sure death.

The hen should be confined in a clean coop with the slats far enough apart to allow the turkeys to pass freely in and out. Move the coop every day and keep everything dry, as moisture is fatal. After the grass is thoroughly dry in the morning, turn the hens out for an hour or two each day and allow the brood to run, but they must not be given complete liberty until two or three weeks old. I have always thought that the delicacy of young turkeys is due in a measure to the rapidity with which feathers are grown. A young chicken retains its down for several weeks until its body is well grown, but a young turkey begins at once to put out large feathers on its wings and tail. This enormous feather growth saps the vitality of the body and leaves it an easy prey to weakness and disease. To overcome this tendency should be the aim of every breeder.—L. V. Hopkins in The Agriculturist.

Rape for Sheep.

The following question asked by a farmer living at Whitney, Neb., was submitted to John A. Craig, professor of animal husbandry, at the Iowa agricultural college: Will rape seed, in this climate and locality, do well, or will it do even moderately well, that is, pay to grow for sheep feed? This locality is becoming quite a sheep country; it is an ideal stock raising country, with climate that is hard to equal. Cattle and sheep on the open ranges all are so far in splendid shape, but one should provide feed of some kind for bad storms.

Professor Craig's reply is as follows: "I can hardly write very definitely as I am not well acquainted with the climatic and soil conditions of Dawes county, Nebraska. I would expect, however, that rape could be grown successfully, especially if sown there early in the season so as to be well established by the time the hot and dry conditions come in the summer. There is nothing like very rich soil to enable rape to withstand very hot and dry weather.

"The best plan I know or to secure this condition is to sow the rape very much as they oftentimes sow turnips in Scotland. The land is ribbed, that is, the furrows are thrown so as to face each other and make ridges, with a rather deep furrow between them. This furrow is filled with well rotted manure, and the soil is thrown back over the manure and then the rape seed is drilled on the top of the ridge, thus being directly over the manure. If sown in early in the season this way it is remarkable what a rank, luxuriant growth of rape may be secured before the warm weather comes on.

"If this is cut four inches above the ground an immense amount of soiling feed may be obtained. If cultivated after cutting, the rape will sprout again and grow very strong. By cutting and cultivating in this way, I have secured three good crops, running thirty-six tons of green food per acre.

"By sowing the rape on ridges in this way, it not only enables one to give a crop two or three good cultivations while growing, but the cultivating after cutting also seems to be very conducive to a quick, rank growth. The rape being a very gross feeder, it seems that it cannot get too much manure. Sown early in this way it seems to me that it could be sowed as a soiling crop for ewes and lambs, and any of the crops might be fed with profit by folding fattening lambs on it."—Farm, Field and Fireside.

Low Heads for Apple Trees.

I believe I am the first orchardist to grow low-headed apple trees in nursery rows, and, in fact, so far as I know, the only one to grow them in that way for sale. Trees with low heads have many advantages over tall trees with long trunks. I commenced the experiment over forty years ago and have grown trees which measure sixty feet in diameter of growth and but eighteen feet in height.

A large portion of the fruit can be gathered while standing on the ground and on steps, and the balance by using a short ladder. This makes the gathering of the fruit much more convenient and economical.

I know of trees so high that it requires the strength of two men to raise a ladder long enough to reach the top. It costs more to harvest the fruit from such trees than it is worth. Again, apples which fall from such trees are spoiled, while these that drop from a low-headed tree are seldom injured.

Other advantages in this method are that the trees are not so liable to injury from wind storms; the roots are better seated and there is no trunk to be injured by the hot sun in summer. There are so many arguments in favor of the low-head method of training, that I am surprised that so few people adopt it.

Some think that the branches are more liable to sag down to the ground, but such is not the case. Trees that are trained high and have a long trunk will throw out their branches more horizontally than if they had started near the ground. The reason for this is, that the branches which start out near the ground are affected by the sun only on the upper side. The under side, being shaded, grows the fastest, and causes the branches to grow more upright. Hence, they are not as liable to get down to the ground or to break down as when trimmed higher. If they ever need to be propped up they are down where it can be easily done.

If any one is skeptical in regard to the reason given why branches of the low-head are more likely to grow upright, he can be convinced by sawing off such a branch, and by seeing how much nearer the heart is to the upper side. He will find the growth twice as thick on the under side as on the upper side. Hence the more upright the growth (besides the advantages enumerated above) the larger and finer the fruit such trees will produce. To start a low-headed tree the first year's growth, graft or bud must be cut back to four or five buds. These buds will make the top of the tree—a tree without a trunk.—N. B. White in American Cultivator.

Poultry Notes.

Sweet milk is good for chicks of any age.

Guard against rats among your young chicks.

Weak or deformed chicks should be killed at once.

Adult ducks do better if allowed a pond to swim in.

Remove and burn all nests as soon as brood is hatched.

Geese and ducks should never be kept in the poultry house.

Chicks do not require any food for the first twenty-four hours.

Do not put kerosene on the roosts during the hatching season.

Nice, clean wheat straw makes the best nests for layers or setters.

Do not grease the hen when chicks are first hatched at this season.

When chicks are hatched be sure to keep them in a warm, dry coop.

Ducks can be raised where there is only sufficient water for drinking.

Keep the coops and yards clean and avoid gapes which are sure to follow filth.

Nests should be renewed every few weeks, as the hens seem to appreciate a clean, new nest.