The Government's Great Work For the Farmers.

By Henry Loomis Nelson.

It is not many years since the Department of Agriculture was a very small concern, but now it is in fact as in name a great and perhaps the most useful department of the government, while at its head is a member of the cabinet.

What does this department do for the farmer? Working in an unfrequented part of Washington, or out in the country in Maryland, or at the various experimennt stations which are usually connected with agricultural colleges, are about 3000 people. Of the 2000 in Washington about one-

IN THE BOTANICAL GARDEN.

half are scientific men. There are two large bureaus, twenty-two divisions, offices, or surveys. Of these seven are administrative, eight technical, an seven are purely scientific. To these must be added the offices of the Weather Bureau, which include 154 observer stations, and fifty-two stations along the coast and on the Great Lakes. The Bureau of Animal Industry has 152 technical stations engaged in meat inspection and quarantine work, and three laboratories where the diseases of animals and their causes are investigated.

This article would be uninteresting and therefore worthless if I should

THE HYDROCYANIC GAS TREATMENT.

undertake to describe technically the work done by the department. I shall try to give the reader a general idea of what these practical and scientific men are doing for the country, because after a visit to the bureau in Washington I was led to read a good deal of its literature, and to look into the subject, and it struck me that the work is not only in every way worthy, but that its real value is not widely understood, has been laughed, or smiled into oblivion, perhaps on account of the jokes about the seeds and the "farmers" who distribute and receive them.

In the first place the department provides an opportunity to make the necessary experiments for the farmer, saving him both time and money, and putting him that far ahead in the game which his father had to learn all about for himself. A distinguished economist told me not long ago that it was hardly possible to overestimate the good that the experiment stations had worked in the business of farming. It was this statement that put me on my inquiry. These experiment stations, by-the-way, receive money from the States—a little more than half as much as they receive from the general Government. As is to be expected, the farmers at first entertained a very contemptuous idea of the scientists in charge of the stations, but they are now coming to depend upon them, and to go to them for advice. Their confidence was first gained by the protection which they obtained from the stations against frauds and impositions in commercial fertilizers, and now the stations look after the farmers' interests in respect of nursery stock, dairy products, and feeding-stuffs, and aid them materially in fighting injurious insects. In addition to these police duties the men at the stations are engaged in making original investigations in agricultural problems, and the results are published in farmers' bulletins and in the form of pamphlets.

An idea of the work done by the whole department and of its value—for its work is well done—may be obtained by an enumeration of some of the subjects which have been investigated and on which publications have been issued. The division of vegetable physiology and pathology has studied the disease of shade and ornamental trees, and has instructed those who plant and care for such trees in the causes of and remedies for the diseases. It has taught fruit growers how to care for and improve the orange, pineapple and other fruits. It has discovered the secret of propagating the fig. It has found remedies for diseases of truck crops, cotton, wheat, corn and other cereals. A good deal of work is done in investigating the character and conditions, including the proper habitat, of plants that are not usually grown here. It has thus been found that jute can profitably be raised in the South, and flax on Puget Sound. The department furnishes farmers with information as to the character of weeds sent by them for identification, and it issues warnings to State experiment stations and to local authorities of the presence of dangerous weeds in their localities. It also makes tests of seeds and publishes the information gained by the experiments. It spreads abroad information as to grasses, grains, poisonous plants, roots and fruits. It makes thorough examination of soils for agricultural purposes, ascertains their texture, and issues a bulletin showing graphically the differences in important types of land. The same bulletin "shows that most of our agricultural crops are adapted to soils of certain texture, differing greatly for the various crops." Bulletins are also issued showing the moisture maintained by these crops, and the differences between adjacent soils. The department tells the farmer the character of his land, the kind of crop best adapted to it and to the climate, is constantly experimenting to discover new crops for him, furnishes him with seeds, tells him the nature of the enemies that will attack his crops, warns him of their actual presence, and instructs him as to the remedies to be applied. It also separates his diseased cattle from his healthy cattle; stamps the latter so that they bring a higher price abroad than competing cattle bring; informs him of the character of the foreign demand for farm products, and advises him as to the best manner of packing his fruit for shipment. The value of the work of the forestry division cannot be overestimated. It has done much to stimulate a widespread interest in the subject of forest preservation, and has accomplished an admirable work in decreasing the number of forest fires. The department also instructs the farmer in the art of making good roads, and excites a desire for them by spreading abroad a knowledge of their great economic value to all who have heavy loads to haul to market or the railway station.

This work is done by the Government for the benefit of those who annually provide from sixty-five to seventy per cent. of the materials for our export trade, and as if to emphasize the fact that the expenditure of the $3,000,000 is partly in aid of commerce, the Weather Bureau, whose warnings of the approach of coast storms have saved millions of dollars' worth of property and thousands of lives, is attached to the Department of Agriculture. There is no doubt that the American farmer is the most intelligent farmer in the world. Statistics of farm mortgages and farm holdings show that he is the most prosperous, and his Government does more than any other Government to help its agriculturist to skillful, wise, and profitable cultivation, and to point out to him the most advantageous methods of distribution.

For all the work which this department has done the government has thus far extended less than $32,000,000. The first appropriation for the agricultural department was of $1000, and was made in 1839. Three years afterwards there was another appropriation of a like amount. Two years after that Congress appropriated $2000. By 1857 the annual expenditure had reached $75,000, but it fell again and then rose, but it did not exceed $500,000 until 1885, and the occasion of the increase for that year was the establishment of the Bureau of Animal Industry. In 1888 the appropriation exceeded $1,000,000, but in that year the Weather Bureau was transferred from the Signal Corps to the department. The Government is now spending about $3,000,000 a year on its farmers, but included in this sum is about $2,000,000 for the Weather Bureau, the Bureau of Animal Industry, and the experiment stations. These last perform as valuable service—perhaps the most valuable service rendered to agriculture by the department.

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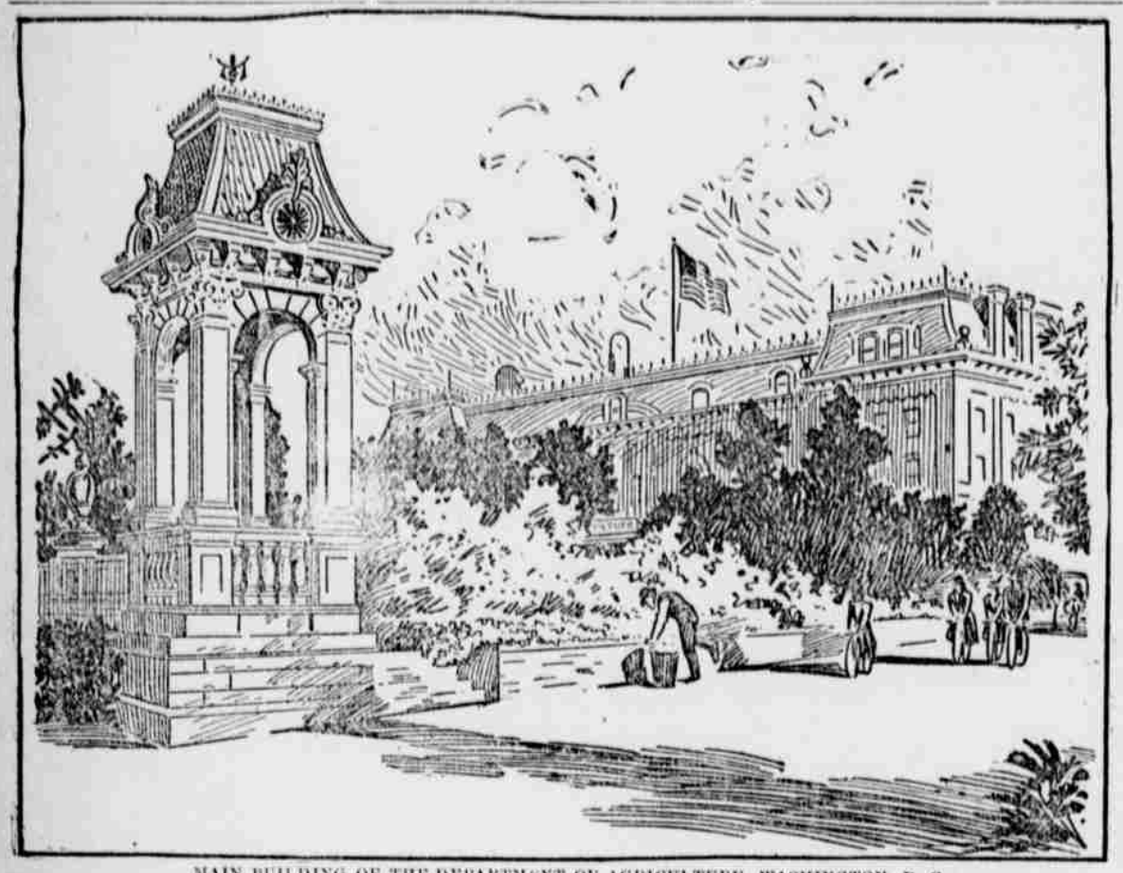

MAIN BUILDING OF THE DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

THE SPRAYING-MACHINE.

WINGS FROM LIFE. MODELLING OF FRUITS AND VEGETABLES.

CHICAGO HAS TWO WILD DOGS.

Said to Be the Only Ones on This Continent—Natives of Australia.

Cautiously creeping from their darkened kennels to snatch a bit of food from the floor of the iron cages when no one is near, and darting back like a flash at every strange noise and sight, two dingo dogs, or wild dogs of Australia, have begun the daily routine of their career behind bars in the Lincoln Park Zoo. They are the only two dingo dogs on the American continent, and were shipped directly from Australia.

Naturalists term the dingo the king of the dog family. While no larger than a medium-sized shepherd they are the terror of Australia ,possessing far more cunning than the fox and being more destructive than the wolf. They have been considered incapable of domestication, but of late years several instances are known where they have been tamed. Until recently the dingo was thought to be a domestic dog returned to the savage state, but in the latest researches of McCoy and Nehring fossil remains of the canine have been found in the pliocene and quarternary strata of Victoria, which proves the animal to be a genuine wolf. He immigrated to Australia through the country uniting Australia and southeastern Asia at a certain period of the pliocene epoch.

The dingo inhabits the plains and the dense forests of Australia. Like the fox, he hides in the daytime and prowls at night, threatening all Australian quadrupeds. He attacks every

DINGO, OR WILD DOGS OF AUSTRALIA.

animal indigenous to Australia; his favorite prey being sheep and kangaroos. Prof. C. W. McCurren, head animal keeper, prizes the dogs as among the most valuable possessions of the zoo.—Chicago Record.

Russian Marriage Custom.

When a Russian Princess marries, after the wedding dinner and ball it is the privilege of the marshals and ministers to see the couple to the nuptial chamber. And after a becoming interval it is the duty of the prince to come out and distribute precious morsels of his partner's garters to the haughty and exclusive crowd who have been waiting. Each little bit bears the royal crown and the princess's initial in embroidery.

Brace For Berry-Pickers.

When a small boy complains that his back aches his elders are apt to remark that little boys do not have backs, but Edgar C. Mendenhall, seems to have come to the conclusion that even grown people have backs to ache when compelled to maintain a stooping position for several hours at a time. In the illustration we show his new back brace for the use of cotton-pickers, berry-pickers, etc. The entire device is light in construction and responds quickly to the different movements of the body, and does not produce an uncomfortable sensation when applied to or tend to heat the body.

APPLIANCE TO STRENGTHEN THE BACK.

A complete set of Mafeking siege postage stamps has been sold at a London auction for $180 and two sets of Mafeking paper money for $110.

THE EDICTS OF FASHION.

New York City.—No outer garment is more popular for winter wear than the blouse Eton that can be worn open or closed as occasion requires.

LADIES' BLOUSE ETON.

Cloth of all sorts, cheviots and the rough surface zibelines are all used, and velvet costumes are promised in unusual numbers. The smart May Manton design illustrated is suited to all materials and is especially becoming to all slight and moderate figures. It is a mistake to suppose that only slender women look well in a garment of the sort, for its lines are tapering and its slight fulness tends to conceal any faults rather than to intensify them. As illustrated, the Eton is of satin-faced cloth in a soft pastel tan and makes part of a costume, the skirt of which is circular. The trimming is made of stitched bands of cloth and the revers and cuffs are faced with heavy corded white silk. Beneath the jacket is worn a peasant waist, with a jabot of white chiffon and stock collar of lace.

The back of the Eton is seamless and fits smoothly and snugly. The full fronts pouch slightly and are stitched from shoulder to waist, but the garment is fitted by means of shoulder and under-arm seams only. The collar, which is a feature, is slightly pointed at the back and flares becomingly against the face. Together with the fronts it is faced with white silk and rolls over to form revers. At the waist is a belt of material, also stitched. The sleeves are two-seamed and snug, but not over tight, and are finished with flare cuffs, headed by a stitched band. The closing is accomplished by means of loops of braid and handsome buttons.

To cut the blouse Eton for a woman of medium size four yards of material twenty-one inches wide, two and one-fourth yards forty-four inches wide, or two yards fifty inches wide, will be required, with one and three-eighth yards or silk to face revers, collar and cuffs.

Ladies' Fancy Shirt Waist.

Simple, useful waists of flannel, cashmere, Henrietta and soft taffeta have become a necessity. Many women seek some variation from the severe shirt waist, yet will tolerate nothing fussy, as it must be worn beneath a jacket that requires to be slipped on and off with ease. At the moment embroidered woolen goods are much in demand, and soft pastel shades predominate, although vivid red holds a conspicuous place. The smart model illustrated by May Manton in the large engraving is chic at the same time that it is eminently practicable. As shown, the material is cashmere in a pastel reseda embroidered in white, with revers and chemisette and belt of stitched black taffeta, and buttons and belt clasp of cut steel.

The foundation for the waist is a lining fitted with single darts and shoulder and under-arm seams. On this are arranged the slightly full back and the pouched fronts. The lining closes at the centre front, the left front proper extends to the centre only, but the right extends over the left and is buttoned diagonally into place. The tiny chemisette and stock collar are permanently attached to the right lining front, and hook over into the left. The neck of the waist is finished with a shaped collar that greatly adds to the effect. The sleeves are cut in one piece each, the outer seams extending to the elbows only, and flare becomingly over the hands.

To cut this waist for a woman of medium size four yards of material twenty-one inches wide, three and one-half yards twenty-seven inches wide, three yards thirty-two inches wide, or two and one-fourth yards forty-four inches wide, will be required.

LADIES' SHIRT WAIST.

New Picturesque Sleeves.

Of the making of new picturesque sleeves there seems to be no end this season. Special designs are constantly appearing on fancy waists, tea-gowns, afternoon toilets, simple morning dresses, negligees, and dainty little open-frocked jackets. The designing of novel effects in sleeves, both long, short, and elbow-length, has reached the dignity of a fine art in Paris, and a number of ateliers make this business a specialty.

Becoming to Little Girls.

Long coats are almost universally becoming to little girls in addition to providing them with the warmth essential to cold weather, health and comfort. The box model is a favorite one of the season, and is never more appropriate or stylish than when worn by children. As a rule, the materials are cheviot, melton and broadcloth, and the colors brown or tan; black, although much liked for their elders, is held too gloomy and old for children's wear. The May Manton model illustrated includes all the latest features and is made from tan colored melton, with collars and cuffs of brown velvet, and handsome smoked pearl buttons down the front.

The coat is cut in three pieces and is fitted with shoulder and under-arm seams, the latter being left open for a slight distance at the bottom and the stitching carried round. The little shoulder cape is circular and curves up at the back. The fronts are faced with cloth, the collar with velvet to an inch from the edge, to which point cloth is applied, and the two roll back and form revers. The sleeves are two-seamed and well fitted, and are finished with roll-over cuffs curved and flaring at the outer edge and faced with velvet to match the collar.

To cut this coat for a girl of two

GIRLS' LONG BOX COAT.

years of age, two and one-eighth yards of material fifty inches wide will be required, with one-fourth yard of velvet for collar and cuffs.