Special Features
PART FOUR—FOUR PAGES

The Sunday Star.

Special Features
PART FOUR—FOUR PAGES

WASHINGTON, D. C., SUNDAY MORNING, APRIL 8, 1917.

Government Helps Raise Flowers for Easter Trade

To paint the lily,
* * * *
Is wasteful and ridiculous excess.

SO said Shakespeare of the floral emblem of purity, of loveliness and especially of the renewing of life. Its fairness and fragrance sung by the poet, its perfection of grace painted by the artist, the lily is the queen of spring blossoms chosen to symbolize the resurrection as it is celebrated at Easter.

The desire for lilies and other spring flowers in abundance to deck the churches and homes at Eastertide has become general throughout the land; and for the gratification of this desire millions are annually spent and considerable industries in various foreign countries have been supported for the past quarter of a century and more.

* * *

A dozen years ago the United States Department of Agriculture took note of this annual exodus of American funds, growing larger year by year, and since then it has been taking effectual measures to keep those millions at home. In the case of the Easter lily, the narcissus, the hyacinth and the tulip, with other spring blossoms used at Easter in immense quantities, the government's experiments have proved that all can be grown in this country, not only as well as abroad, but better, and the department scientists are now working out the problems of how and in exactly what sections of the country Easter lilies and other bulbous plants and delicate flowering shrubs may be grown to best advantage.

The Bermuda lily was introduced into the United States nearly half a century ago as an appropriate Easter decorative plant, and since then the little isles have reaped a harvest of American wealth from the trade in lily bulbs and lily plants in bud and bloom, which have been brought into this country by the million each season.

Of late years the Bermuda lily bulbs have given the United States florists trouble by reason of disease, which has caused great uncertainty as to result and general deterioration in the stock, a condition attributable, it is believed, to continuous planting in the same spot. On account of this difficulty with the lily from Bermuda this country's trade has been transferred in large part to Japan, some of whose islands now supply the larger part of the American trade in Easter lilies.

* * *

Easter lilies are shipped into the larger cities of the east, such as New York, Boston and Philadelphia, during the months of July and August. Each of these cities receive hundreds of thousands of bulbs annually and distribute them to the trade, the larger florists taking from ten thousand to fifteen thousand bulbs a season. The price of the bulbs is in the neighborhood of a hundred dollars a thousand. The florist loses no time in planting his precious freight in a temperature where only the root will start.

As frost means death to Easter lilies they aretaken into the greenhouse in October. There the temperature is allowed to go no higher than 55 degrees for the next few months. Within a few weeks from Easter they are examined, the forward plants retarded by cool temperature, the backward specimens permitted to hasten their buds at a temperature of from 70 to 75 degrees, the object being that all shall attain their full glory of bud and blossom on Easter day.

To obtain perfectly healthy American stock from which to make its experiments in bulb culture in this country the Department of Agriculture some years ago planted the seed of the lilium longiflorum, which is the botanical name of our familiar Easter lily. From this planting there resulted several pounds of seed, with which experiments were made in sections of Florida, Mississippi, the state of Washington, Texas and California. The result has been the production of stronger, healthier and handsomer Easter lilies than can be grown from imported bulbs. Federal experimentation proves that climatic and soil conditions in southern California are such as to favor the production of the finest Easter lilies in the world.

* * *

The wizards of floral science in the department, besides developing an Easter lily bulb which will be free from disease and stronger than the foreign product, are also experimenting with a view to securing a new type of Easter lily, which may be grown directly from the seed for the Easter trade. This will lighten materially the cost of the American grown plant. Its present development from seed to bulb and from bulb to blossoming plant is a process requiring between two and three years for maturity, with its resultant labor, which in this country cannot compete with the cheap labor of foreign lands.

The Department of Agriculture is also expending its efforts upon other plants, whose bulbs and roots are imported each year at a cost of nearly three million dollars to supply the Easter trade. These include hyacinths, tulips and narcissi, with the decorative azaleas, rhododendrons, lilacs and other blossoms, which are brought to the zenith of their glory at Eastertide.

A recent walk through one of the forcing houses of a large floral establishment gave a practical insight as to what is meant by forcing plants for the Easter trade.

"The bulbs which produced these beautiful blossoms were all dug in foreign countries last June and July and arrived here in August," said the florist. "The different varieties, of course, mature at different ages. Immediately upon their arrival at the great central stations, like New York, Chicago, Seattle, Galveston and San Francisco, they are placed in sealed cars and shipped immediately to the different cities, where all bulbs wanted for immediate planting are taken out and distributed to the smaller growers.

"The balance of the year's supply are put in cold storage in their original packages and sent out to the growers by the hundreds or thousands per week as desired. In this way we arrange to have Easter lilies and other bulbous plants in bloom 365 days in the year in every city in the Union. After the proper shipment of the bulb, it is all a matter of retaining in cold storage until time for growing, and then the manipulation of retarding or forcing in the greenhouse for blooming at the season desired.

* * *

"The plants imported for the Easter trade include (besides the bulbous flowers) rhododendrons, which come in shiploads from Holland, where they are grown to perfection, in October, November and December. With them come the lilacs for the early spring trade and the Kentia palms with which Holland supplies the world. The azalea comes from Belgium at the same time. All of these plants come in a semi-dormant condition, and are retained in cold storage until they are wanted for forcing for the season's blooms.

"Yes," said the man of flowers, "the war has seriously interfered with the import of both bulbs and decorative shrubs. In the first place some of the European growers have been digging up their bulbs and feeding them to their animals, and planting food products in the place of their flowers. Again, as doubtless you know, ocean transportation has been seriously interfered with. Time and again shipments have been held up until the plants were wholly or partially spoiled.

"See that azalea; note the green shoots springing up all through the blossoms. The shipment of plants containing that specimen was held up by the war, and when it arrived the plants were all sprouting, and too late for remedy. That head should have been a mass of solid bloom, every sprout nipped in the bud as it appeared when growing in the hothouse, thus allowing the bloom to take the place of all foliage. That delay in transportation let them get ahead of us, and there is nothing to do but to accept the plants as they are.

"Of course, this sort of thing can all be avoided when we grow our Easter lilies and other bulbous flowers and decorative plants in this country. At present, however, we are using mainly foreign stock. I myself am especially interested in what is known as the Creole lily, which grows easily in this country. It was originally brought from Bermuda and planted outdoors and is absolutely hardy here. At a recent flower show in New York they had a hundred of these lilies in bloom, and I should like to see this home-grown plant propagated to an extent of its being made to supply the Easter demand in this country.

"The substitution of home-grown Easter flowers for those from abroad is as yet largely a question of labor and transportation. The government's experiments in the Department of Agriculture's grounds in Washington and in the west are proving that all of our Easter flowers can be grown as well in this country as abroad. Some of them, notably the Easter lily, can best be grown in California, but there must be some readjustment in railroad rates before the bulbs, roots and flowers can be brought from the Pacific to the Atlantic coast at a rate which will compete with the lighter charges in bringing them from foreign countries."

After a series of tests made by the Department of Agriculture in various states it has been found that tulips, narcissi and hyacinths can best be produced in this country in certain parts of the Pacific coast, these being northwest Washington and northwest California, and that there are areas in those states extensive enough to supply all the bulbs this country needs, with soil and climatic conditions even more favorable for the culture of "Dutch bulbs" than the Haarlem bulb district of Holland. The tulips grown in the testing grounds of the Department of Agriculture at Washington, as well as those which it leases in the west for its work, are longer and stronger in stem and handsomer in flower than any which have been produced from imported bulbs.

* * *

Experiments by horticulturists for the past eight years have gone to prove that the soil is more fertile, mechanical conditions superior, land deeper and better drained and the product hardier, with more dense, solid and better ripened bulbs than those of average Holland production. They also bloom earlier, and give blooms of better substance, longer and stronger stems and colors clearer and more brilliant in tone. The cost of preparing the beds in this country is less than in Holland, where expensive canals must be dug and maintained; also, danger of frost is less, in consequence of which root growths proceed steadily throughout the winter, with no retarding of growth. Then, too, the blooming season comes nearly a month earlier than in Holland.

Said one of the scientists of the Department of Agriculture in a recent talk on the subject of bulb culture in America for the home trade: "One of the main deterrent factors with those who contemplate entering the business in this country, where it seems probable they can produce a better article than the imported, is that of the extensive hand labor as yet necessitated in bulb culture. The biggest job in this connection is digging. As the business expands, however, it is more than likely that the American farm implement manufacturer will provide machinery to overcome this need, as he has in the past overcome every other obstacle in farm operation. Of late it is reported that machinery is coming into use even in Holland to a limited extent in bulb culture on account of the scarcity of labor due to war conditions."

Whether due to the war, or to a knowledge of the tendency on the part of the United States to keep its bulb trade at home, a number of Holland and Belgium bulb and decorative plant growers have emigrated recently to the Pacific coast and have entered the business with a view to assisting in the American supply of Easter flowers. One grower of azaleas and araucarias who came from Ghent in Belgium is endeavoring to establish this business in California. Within recent weeks he made the statement to the effect that he found conditions here superior to those in Belgium. One great advantage, he finds, is that plants bud here fully several weeks before they finish budding in Ghent, enabling them to be forced for the early American market.

He states that America imports annually between two and three millions of decorative plants, including rhododendrons, azaleas, hollies, boxwoods and araucarias, all of which can be produced here in commercial quantities at a cost which will defy competition, provided the transcontinental railways will encourage the development of right rates, which will enable dealers to use the home-grown products.

There is one widely used Easter flower, formerly imported from Holland, which has been thoroughly established in this country, having been brought to bloom in sufficient quantity to supply the entire demand. This is the freesia, prized by florists and people alike as a beautiful and fragrant Easter blossom. A talk with one of the horticultural experts of the Department of Agriculture resulted in some interesting facts concerning the freesia.

* * *

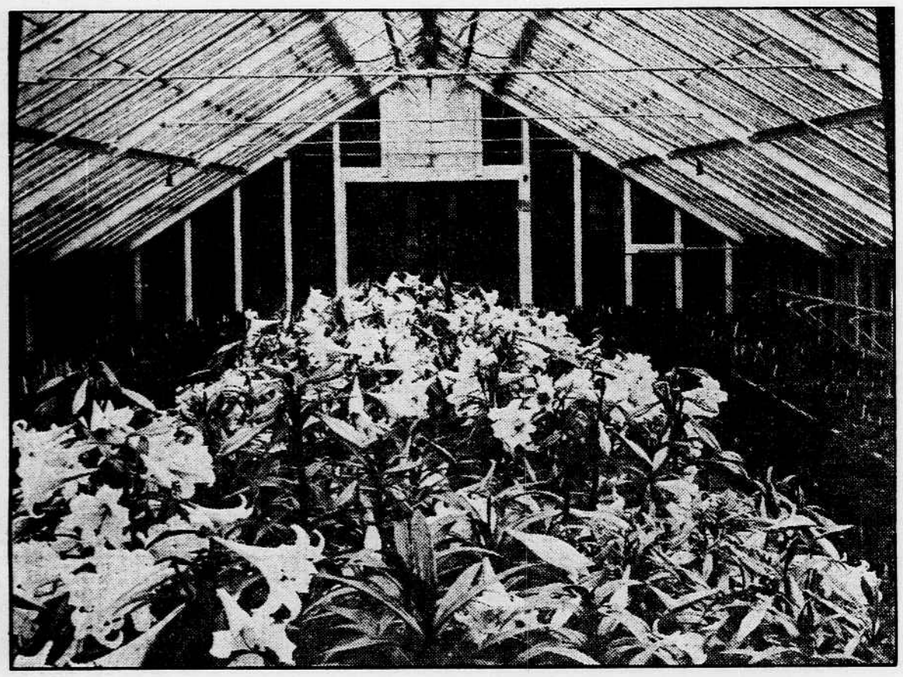
"The plant is a native of South Africa," he said, "but had been commercially grown in Holland up to about fifteen years ago, when it was found that it could be produced here more satisfactorily than it could be imported. We have produced strains larger and finer and very much better fitted for our use than the original flower. It has been developed in Florida, to some extent in Georgia, but to the greatest extent in California, where it is cultivated in great, sweet-scented fields in Santa Ana, Santa Barbara, Pasadena and San Gabriel. These towns are the center of our home-grown freesia, now thoroughly Americanized and supplying our entire trade.

"The original colors of the freesia were white, known as 'Purity,' and a rather lurid yellow, but about fifteen years ago a few plants of a pale pink-tinted species, known at 'Freesia armstrongii,' were found in Natal, South Africa. It was a small, lilac pink flower, but scentless. This species seems to be extremely rare in nature and it was eagerly seized upon by propagators in different parts of the world.

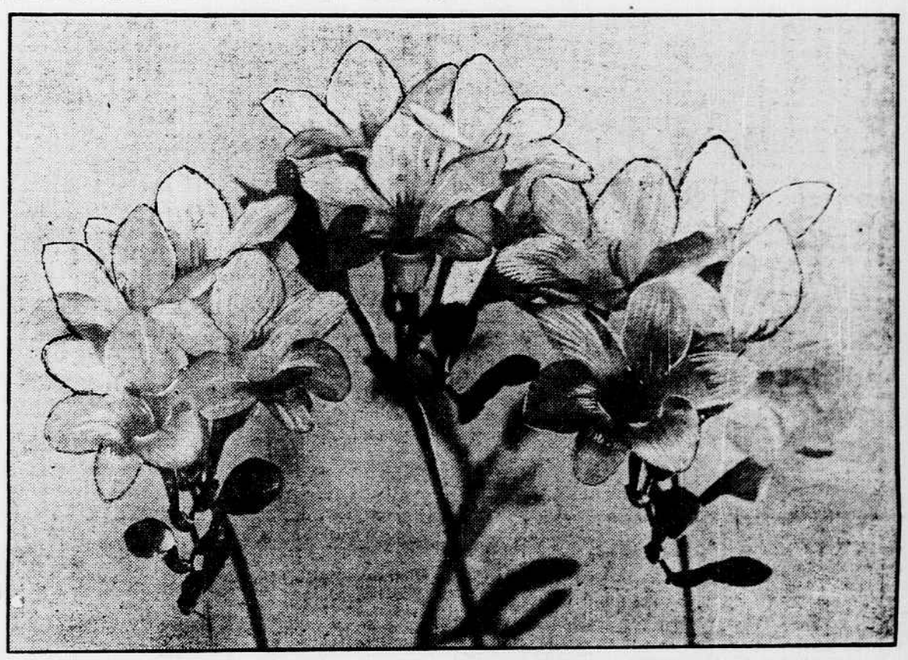
"Italy, France, Holland, England and this country all procured specimens, and by hybridizing and intercrossing the seedlings a great range of beautiful colors have been produced. They run from cream to golden yellow on one hand, and to pale pink and light crimson on the other, and even a blue has been developed. These varieties are still scarce, but they are known to the trade, which has termed them 'rainbow freesias.' They exhale a delicate apricot-like fragrance.

"The Department of Agriculture has been developing this beautiful flower for some time past, and it has now a large number of bulbs under development at the experimental station here. It is our hope that by this time next year we may be able to give the public an exhibition of this beautiful, home-developed Easter flower."

SPLENDID SPECIMENS OF AMERICAN-GROWN NARCISSI.



EASTER LILIES GROWING IN DEPARTMENT OF AGRICULTURE HOTHOUSES.



ONE OF THE NEW ARBUTUS PINK FREESIAS GROWN BY THE DEPARTMENT OF AGRICULTURE.

Are the People of Russia Ready for a Republican Form of Government?

NICHOLAS ROMANOV is now ex-Czar of Russia, his wife is ex-czarina, his son, ex-czarevich, and the rest of the Romanov family have each an ex prefixed to their various titles. The lovers of liberty all over the world, and particularly the lovers of the Russian people, have welcomed these additions to the titles of the former rulers of Russia. Even President Wilson, in spite of the reserve imposed by his office, has spoken a word of warm welcome to the new sister republic half way across the globe.

The speed and the effectiveness of the final act in the drama of Russia's struggle for liberty has made the world gasp with astonishment. The new regime has now been in full control for several weeks and there have been no alarming signs of weakness or threatening indications of possible counter revolutions or of disorders.

* * *

It used to be considered bad policy to swap horses while crossing a stream, but apparently this does not apply to a nation that was going through the most dangerous period of its existence on a runaway horse headed for a whirlpool. The change in mounts has been successfully accomplished and the immediate danger of anarchy or of disorganization in the face of the enemy seems to have been avoided, but the great and fundamental question still remains "Are the Russian people capable of self-government?"

A population, 70 per cent of which is unable to read or write, sparsely populating an immense domain and consisting of a large variety of races and never having had any experience in national self-government, may in the minds of its best friends arouse some apprehension about its ability to cope with a democratic form of government.

But first of all one must consider the fact that the old regime was not efficient or satisfactory to any element of the population not directly connected with its administration. The peasants, forming a vast majority of the population, were kept in ignorance and, through an inequitable system of taxation and inability to organize for co-operative enterprises, were always in danger of starvation whenever the elements were not favorable to the crops.

The government, to the Russian moujik, was the tax collector and the constable, the one extorting from the peasants a large part of their inadequate income and the other suppressing all activity for the betterment of economic conditions. The friends of the autocracy have assiduously spread the belief that the peasants looked up to the head of the government, the czar, as their "Little Father," and had for him a semi-religious veneration somewhat akin to that felt by the Japanese peasant for the emperor.

* * *

The czar was indeed the head of the Russian church, but it appears that the Russian peasants' loyalty to him was imaginary, or at least was a thing of the past, for wherever the peasants had a chance to express their opinions they showed that they were vastly more concerned about securing more land than about the maintenance of any governmental regime. The city population and the industrial workers were opposed to the government because of its interference with their liberty of speech and of the press, because of the constant persecution of the more vigorous and more liberal-minded elements and because of the graft and corruption practiced by the bureaucracy.

The professional classes, the so-called intelligenzia, were distinctly progressive and were engaged in a constant struggle to do away with the autocratic regime. The nobles and large landowners, who had various privileges under the old order, had the least reason to look forward to a change, but even the nobility and the landlords were not satisfied with the government, because they were heavily in debt to it on account of extravagant living and the mortgaging of their estates in the nobles' bank.

A debtor class seldom has much love for the creditor, be he another class, another section of the country or the government. But be it said in justice to the Russion nobility that a large number of its members participated in the revolutionary movement out of pure patriotic motives, and among the men who suffered in the mines of Siberia and at the hands of executioners were many of the proudest names of Russia.

It was only a small group of courtiers that was willing to support the government, and it is a curious fact that the names of the high officials during the last few years were not in many cases the names of Russian nobles and, in fact, were not the names of Russians at all, but of Germans from the Baltic provinces who were in sympathy with the government that gave them opportunity of rising to the top.

Whatever support the government had among the landed proprietors and the nobility was forfeited since the beginning of the war, when to the crimes of despotism and oppressive inefficiency were added corruption on an enormous scale and treason to the country.

* * *

The fourth duma, which has now charge of the government in Russia, was elected under a system of franchise that gave a two-thirds majority to the conservative elements, but since the war began the conservatives one by one deserted the ranks of the government supporters and jointed hands with the liberals, so that that body, in spite of not being representative of the people at large, was not able to support the government and led in the final overthrow of the autocracy.

It seems perfectly clear that every element of the population is pleased with the change and is willing to co-operate with the provisional government in establishing a permanent one. Will the people be able to organize a stable and efficient machine that will see it through the first few years of struggle and readjustment? The answer to that question is emphatically affirmative.

The peasants, who form the backbone of the nation, in spite of their poverty and illiteracy, have had a very fine training for self-government, for, within the limits of the villages there has always existed a communal form of government, the mir, in which all the heads of households assembled for the determination of local affairs. The mir until recently owned all the land and distributed it among the peasants, and they were thoroughly capable of handling their own affairs.

The Russian peasants, as a matter of fact, have a pronounced genius for organization. For instance, when they migrated to Siberia several villages would get together and elect a delegate, a so-called forerunner, who would investigate the country and report on the opportunities for agricultural development. The peasants knew how to select reliable men and followed their advice before undertaking a migration. Such men have been sent even to Canada and South America.

Another sign of the ability of the Russian peasants to make use of representative institutions was seen in the fact that those of them who were elected to the duma proved to be among the ablest men there, in spite of their lack of book knowledge, and it is vastly significant that the reprseentatives in the duma received delegates from their constituents, who would inform them of the needs of the communities. If the Russian peasants could succeed in doing that much under the handicap of an interfering autocracy it is not too much to expect that they will be capable of taking part in a democratic form of government.

* * *

The industrial workers in Russia are only one removed from the peasants. They are largely peasants who, owing to the increase in population, found it impossible to subsist on the land and moved to the cities to seek industrial employment. They are more progressive than the peasants. A large proportion of them are literate and they are widely permeated with socialistic ideas. They will form the radical element in the new democracy.

That they are capable of wonderfully concerted action is illustrated by the fact that in 1905 they succeeded, in spite of strict legislation against unions and positive prohibition of strikes, in organizing a national strike of all industries on a scale never equaled in any country. The whole nation was paralyzed for several days; the trains did not move, the water works were out of commission, the lighting systems were not operating, the telephones did not ring and all the channels of trade were interrupted.

It was that strike that forced the czar to grant Russia her first representative assembly, a step which he was never able to retrace and which has ultimately led to his overthrow. A class of people which is capable of such wonderful co-operation under the tremendous handicap of a watchful autocracy can be relied upon to take care of itself in a democracy.

It is hardly necessary to state that the educated classes in Russia are ready for self-government, for these people have been interestd in the movement for liberalism for over a century and have developed leadership of unusual ability. The men who were assembled in Petrograd as members of the first duma were the flower of Russian intelligence. Most of these men are still in active life, and there are many others who are ready and able to mold public opinion and to assume leadership in the new democracy.

This element of the population has shown its organizing ability in that the Union of Zemstvos and the Union of Municipalities have been for two years the mainstays of the Russian army in spite of the discouragement on the part of the government, and have organized hospitals, supplied the troops with food, clothing and munitions, and have succored millions of refugees from the territory conquered by the Germans. The ability of accomplishing this in spite of constant interference is a hopeful indication of the capacity of the Russian people to work together for a common end.

* * *

That the Russian people stand high in the arts and in science is acknowledged by the civilized world. Indeed, it was an anomaly to have a large number of twentieth century thinkers gagged under a sixteenth century regime. The Russian press, now unshackled, will be able to open its columns to the best thought of the country, and the shaping of public opinion toward a stable form of self-government will proceed at a rapid pace.

One other element in the Russian population needs to be considered and that is the so-called alien element. In this class are the Poles, who, however, have had a parliament long before the United States came into existence and who have already been promised an entire autonomy in their own affairs. The other large so-called alien element is the Jews, who were persecuted by the bureaucracy, but who will now co-operate with the Russian people, with whom they have never had any quarrel.

The business ability of the Jews will be of tremendous assistance to the new democracy, and there is no danger of any dissensions from that source. There are in Russia a great many tribes of Tartars and other Mongolians, who lead a more or less nomadic life and who will be slow to enter into a self-governing organization. That will be one of the problems that the new government will have to solve, but it is not an insuperable obstacle.

When the constitutional convention assembles and the final form of government is settled upon Russian will enter on a new era in its national existence. The new republic, which is likely to be organized by the convention, will doubtless have many trials to live through and many obstacles to overcome, but so did the American republic and the French republic when they were young.

From the fact that it was possible for the representative assembly to take over the reins of power in the midst of a military crisis and to keep the wheels of industry revolving and the military machine in efficient order, it appears that the Russian people will be fully capable of taking their place among the world's democracies.

RUSSIAN PEASANT GIRLS IN NATIONAL HOLIDAY ATTIRE.

A TYPICAL COTTAGE OF A RUSSIAN PEASANT.

Easter Egg Dyes Are Scarce

EGGS are still high; dyes are scarce; what are the children doing for Easter eggs this year? With the cost of living in general soaring to the skies, many mothers are finding that they can ill afford to use the valuable egg for mere pleasure. Purely for use are eggs these days.

True, the spring prices for eggs are in effect. Indeed, the cold storage houses provide all at once great quantities of eggs which have been treasured throughout the winter to flood the spring market. This accordingly brings the price within the reach of many who were denied eggs during the winter months.

The great markets of the country now reap the benefit of the enforced winter famine, but at the same time eggs are not to be the cheap commodity that our grandmothers knew when they set about to fill the rabbit's basket. But the egg subject is only one-half of the lament, for the threatened Easter egg is contained in it. The dye situation, a mighty problem which has put wrinkles in the brows of textile manufacturers all over this country, and which embraces as a tiny part the egg dye trade, is the other harassing element this year.

No dyes, no more brilliant eggs—these were the ominous whisperings from the dye world some time ago. It is incomprehensible to the grown-up, whose Easter egg days occurred when eggs sold for a cent apiece or less, and before the British and French navies expended the bulk of their energy to cut off German commerce. Yet it is true, and likewise logical, for the dye factories which only lately are able to furnish dyes for the major needs of the United States are too engrossed in their new operation to cater particularly to the kiddies. Easter egg dyes are made from coal tar products. For this reason some of them are poisonous, but the food and drug act has taken the precaution to pass upon the different shades and designate a certain number which are harmless. These are three shades of red, two of yellow and one each of orange, blue and green.

* * *

This year sees more than thirty American dyestuffs works producing about 27,000 tons of staple synthetic colors, every pound derived from American coal tar. Before the war 2,500 tons of aniline, the most important coal tar product used in the manufacture of artificial color, were imported. Today it is being manufactured at the rate of nearly 20,000 tons annually. A new national industry has been created and hardly has the chemist begun adequately to realize the enormous material resources of the American field, forest and mine. Spreading for view is a panorama of industrial development in which new investments exceed $200,000,000.

After the war it is probable that plants that now manufacture explosives will be converted into dyestuff factories. This transformation will be accomplished with little difficulty, for the same raw materials used for explosives are used for dyestuffs. A few years hence, says Dr. Thomas Norton, formerly commercial agent for the Department of Commerce and an authority on the American dyestuff situation, this country will manufacture all tints and shades required to meet diversified requirements. The scarcity of different colors which this dyestuff famine has caused gives an importance to any new dye that is suggested. The forest service has brought forth a new color, which it says may be extracted from the wood of the sage orange tree.

So stands the dye subject. Some large manufacturing concerns are beginning to place dyes on the market for sale to the general public to be used for household purposes.