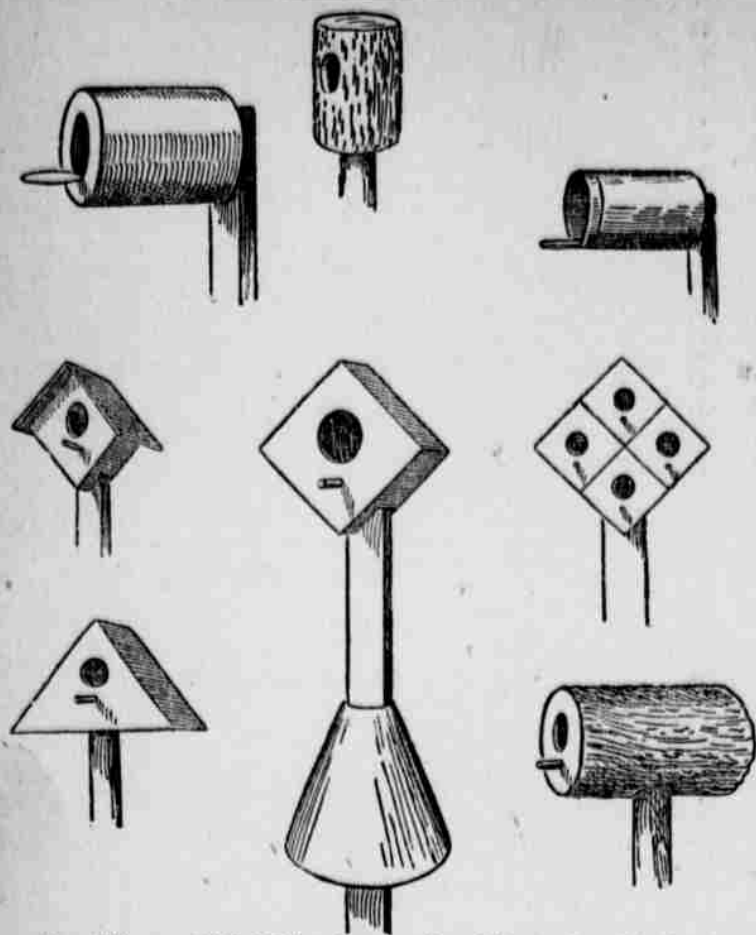


IMPROVED BIRD HOUSES.



One of the most delightful and suggestive of the teachers' leaflets issued by the College of Agriculture, Cornell University, for use in the public schools, is one entitled "The Birds and I," by L. H. Bailey. This is illustrated by a number of suggestions for bird houses, which may be copied by all the boys and girls who are always wanting to use hammer and nails and "make something useful." Some of the many forms which can be used are shown in the picture. Any ingenious boy can suggest a dozen other patterns. The floor space in each compartment should not be less than 5x6 inches, and 6x6 inches or 6x8 inches may be better. By cutting the boards in multiples of these numbers, one can easily make a house with several compartments; for there are some birds, as martins, tree swallows and pigeons, that like to live in families or colonies. The size of the doorway is important. It should be just large enough to admit the bird. A larger opening not only looks bad, but it exposes the inhabitants to dangers of cats and other enemies. Birds which build in houses, aside from doves and pigeons, are bluebirds, wrens, tree swallows, martins, and sometimes the chickadee. For the wren and chickadee the opening should be an inch and a half auger hole, and for the others it should be two inches.

The South's "All's Well."

By R. H. EDMONDS.

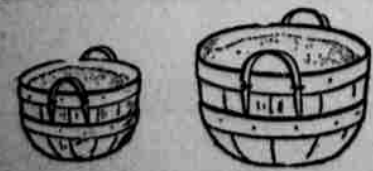
Ten years ago the South fought its first skirmish in the endless battle that ever rages for the world's commercial supremacy. Its pig-iron entered the markets so long dominated by Pennsylvania furnaces, and, to the dismay of those who had affected to despise its rivalry, won a substantial victory. Alabama iron became a factor in every iron-consuming centre, and from this position it could not be dislodged. About the same time Southern cotton mills were forcing their product into successful competition with the output of New England mills. But as Pennsylvania iron and steel people took refuge in the claim that the South would never advance beyond the iron-making stage, that it could never become a factor in the higher forms of finished goods and in steel-making, so the New England mills lulled themselves into a sense of security on the claim that though Southern mills might make coarse goods, they could never acquire the skill and the capital needed for the finer goods. In the light of what has been accomplished within ten years, it seems very strange that such arguments as these should have done duty in so many newspapers and in so many gatherings.

A Prophecy.

Judge Kelley—"Pig-Iron Kelley," as he was familiarly known—had been wiser than his people. Nearly twenty



years ago he proclaimed the coming power of the South in all industrial pursuits, and heralded it not as a disaster to Pennsylvania and to New England, but as an added strength to the industrial power of the country. "The development of the South," said he, "means the enrichment of the nation." In this light the progress of the South should be watched, for while its industrial upbuilding may mean the changing of some forms of industry in other sections, there is versatility enough in our people and in our country to find a new avenue for the employment of brains and energy and capital for every one that may be closed by changing business conditions. New England may yield the sceptre of cotton-manufacturing to the South, to the vast enrichment of the South, but New England will find new openings for its tireless energy and its accumulated capital.



The South will become enormously wealthy through the change, but New England will not be the poorer. The First Skirmishes. Just about the time when the South

was winning these first skirmishes, and when its people were dazzled by the new opportunities of employment and wealth creation which were open-



ing before them after the darkness of thirty years of war and reconstruction trials, there came the world-wide financial panic following the Baring failure. The South, suddenly brought down from its dizzy speculative height, had to face new conditions. The business world recognized that the supreme test of the South's inherent advantages and possibilities had come. It faced the situation—its iron-masters steadily reduced the cost of iron-making until furnaces which had been turning out \$8 and \$9 iron



were able to produce \$6 iron; its cotton-mill owners wisely abandoned old machinery, and, equipping their mills with every modern improvement, drove them to their utmost capacity night and day, in order to double the output on their invested capital and proportionately reduce the cost of goods; its cotton-planters, who had kept their corn-crisps and smoke-houses in the West, buying in the aggregate about \$100,000,000 worth a year of Western corn and bacon, commenced to raise their own food supplies, and in this way, returning to the old ante-bellum system, reduced the cost of raising cotton. While these changes, all revolutionary in their character, were in progress, the small bankrupt railroad lines were brought into compact systems, new and heavier rails laid, rolling-stock increased and necessary extensions made.

Iron and Coal.

Thus the South passed through the long period of depression, standing the great test, which came so unexpectedly, in a way that strengthened the world's confidence. It not only

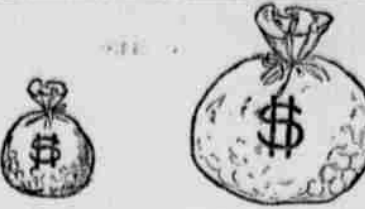


held its own during this period, but its iron-makers entered foreign markets, and demonstrated that the South could dictate the price of iron for the world. Alabama iron set the price in England and on the Continent, as well as in Japan, and even from Jerusalem came an order for it. This marked a revolution in the world's iron and steel interests. Henceforth the world was the market for Southern iron. When this point had been reached, the next step was to build steel-works commensurate with what has been accomplished in iron-making; and to-day two gigantic plants—one to make steel billets, and the other to make finished

steel products—are nearing completion at Birmingham. They have cost about \$2,500,000. They have



already booked heavy orders for steel billets for shipment to Pittsburg. A number of furnaces built during the boom of 1889-90, and which have been idle ever since, have lately been bought by strong companies, and are now being put into blast. With every furnace crowded to its utmost capac-



ity, which will soon be the case, the output of Southern iron in 1900 promises to be nearly fifty per cent. larger than ever before. The demand for coal exceeds the production, though that is now at the rate of 40,000,000 tons a year. There is almost feverish activity in enlarging the output of old mines, in opening new ones, and



in building coke-ovens; for a ready demand meets every ton produced, with a profit that makes glad the stockholders.

The Phosphate Industry.

Turning from iron and coal, with the almost fabulous profits which they are yielding, to other industries, phosphate-mining looms into prominence. Up to ten years ago South Carolina was the only American source of phosphate rock, and our fertilizer factories, as well as those of Europe, had to depend upon the few hundred thousand tons which that State annually produced. Then it was discovered that Florida had vast phosphate beds, and soon that State surpassed South Carolina in this industry. Two or three years later similar discoveries were made in Tennessee, and the mining activity which has followed reminds one of the tales of de-



velopment in new gold regions. Ten years ago the South's output of phosphate rock was not more than 750,000 tons; this year it will be 2,000,000 tons. What this means in the diversification and improvement of agricultural conditions is too broad a subject for treatment here.

The Forests.

Possessing one-half of the standing timber of the United States, the South is building up immense lumber and wood-working interests, and throughout the entire lumber region business is as prosperous as in the iron districts.

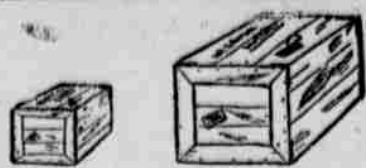
Cotton is Still King.

Though the value of the grain now raised in that section exceeds on the farm the value of the cotton crop, cotton is still the dominant power in the business life of the South. No other country has such a monopoly of any agricultural staple of such world-wide influence as the South has of cotton. Cotton and cotton-seed bring to Southern farmers an average of \$300,000,000 a year. The comparatively new industry of cotton-seed oil making now employs over \$40,000,000 of capital, and yields an annual product of upwards of \$50,000,000. From Galveston alone the foreign exports of cotton oil and cotton-seed meal are averaging nearly 1,000 tons a day. Of this industry the South has almost as much of a monopoly as it has of cotton-growing, but in the manufacture of cotton goods this section, though making marvelous progress, is still only getting well started. There are about 100,000,000 cotton-spindles in the world. The South furnishes the cotton for about three-fourths of these, or 75,000,000 spindles, but has only 5,000,000 spindles. To consume in its own mills its crop of 10,000,000 to 11,000,000 bales would require the investment of over \$1,500,000 in new mills, and long before that point could be reached, even at the present rapid growth, the world will annually require of this section from 25,000,000



to 30,000,000 bales. In 1880 the South started on its cotton-mill development with a basis of 667,000 spindles, representing a capital of \$21,000,000. By 1890 it had \$61,000,000 capital in this industry and 1,700,000 spindles. To-day it has

5,000,000 spindles and about \$125,000,000 of capital invested in cotton mills, while mills under construction represent about \$25,000,000 more. The most significant sign of the times in this industry is that New England mill-owners, recognizing that the South is bound to win, are transferring large capital to Southern mills. A



number of the leading mill companies of the former section have, during the last few years, built branch mills, costing from \$500,000 to \$1,000,000 each, in the South; and now one of New England's greatest corporations is spending \$2,500,000 in building in Alabama what will be the largest cotton-mill ever constructed as a single enterprise. The recent advance in the price of cotton is bringing prosperity to the farmers, and if it holds for the balance of the season, will mean \$75,000,000 more to them than they received for last year's crop.

In diversified interests the same story of progress and prosperity runs. The Newport News Ship Yard, with over \$10,000,000 of work under contract, including two steamers of about 12,000 tons each for the Pacific trade, the largest ever built in America, is said to be employing more hands than even the Cramps; the Richmond Locomotive Works are competing with the Baldwins in exporting locomotives; the Maryland Steel Company has been furnishing steel rails for Russia's Siberian Railroad, for Australia and other distant regions; Ala-



bama coke has gone to Japan, and the export of both coke and iron is only limited by the fact that the home demand now exceeds the supply.

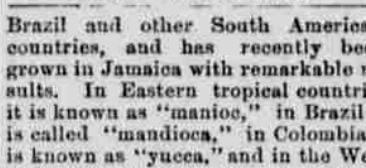
The South's Story in Statistics.

Statistics are often uninteresting, but the story of the South's progress cannot be told more clearly than in the comparative illustrations scattered through this article, in which reliable estimates are given where exact figures are not obtainable.

Surveying the whole Southern situation, what has been done and what is under way, it can be truly said that—"all's well."—Harper's Weekly.

Cassava, the New Crop.

The Spanish war seems to have given promise of benefit in a direction entirely unexpected in stimulating the study of tropical products. A plant has been "discovered" that promises to become to the Gulf states what wheat is to the North. For years this plant, which resembles a gigantic beet, has been a staple product of



SEVEN CASSAVA-ROOTS.

Brazil and other South American countries, and has recently been grown in Jamaica with remarkable results. In Eastern tropical countries it is known as "manioc," in Brazil it is called "mandioca," in Colombia it is known as "yuca," and in the West Indies the name "cassava" or "cassada" prevails. The gigantic roots produce a flour that rivals the best of wheat. They give a juice that makes an excellent table preserve. They yield an abundance of starch of a superior quality. They also make a remarkable showing in fattening cattle.

If one-half of what is claimed by the United States Department of Agriculture and the Jamaica Agriculture Society be realized, the problem of what to do with the vast areas of almost arid lands of the Gulf states is to be solved by "cassava."

Had It in Various Assortments.

It was in one of the big department stores. "What do you wish to-day, madam?" asked the courteous floor-walker.

"Nothing, I—"

"Sixteenth floor. Take the elevator. We have nothing there in large and varied assortments. James, ring the bell for the lady."—Harper's Bazar.

NEW YORK FASHIONS.

Designs For Costumes That Have Become Popular in the Metropolis.

New York City (Special).—There has never been a season when so many summer gowns, or rather the style of gowns associated with the summer

colors in fantastic figures. A new shade of blue which is light, but not a baby blue, is another material which is seen in a smart waist.

Not the least fascinating are the exquisite blouses of guipure lace. These are made entire, without lining, and made to slip over any solid lining.

One illustration shows a new style of silk which comes in one piece—a skirt-length, it is called. This has an applique of mousseline de soie which is embroidered in neutral shades and a set pattern. The silk differs from the material usually employed in waists, inasmuch as it is soft and thin, almost transparent.



HOUSE GOWN OF FRENCH FLANNEL, TRIMMED WITH VELVET RIBBON.

Simple Shirt-waist Model. The Czarina shirt-waist, notwithstanding its title, is a simple model that is suitable for making up almost any pretty fabric, but a particularly taking one included in the handsome trousseau of an autumn bride is made of amethyst velvet and heliotrope silk. It is formed with a deep yoke at the back. There is a wide plait down the front, where the waist fastens with pearl and amethyst studs. The back of the waist is very closely fitted, the sleeves close coat shapes, with velvet cuffs, and the fronts droop a little at the belt.

Plain Setting For Emeralds. Most people consider emeralds must be surrounded with diamonds to bring out their beauty, but a big square emerald owned by one woman who is fond of the rich, green stones is in a perfectly plain setting, square cut, as emeralds are, and is beautiful in its soft velvety richness.

How the Hats Are Worn.

Hats are worn in Paris and New



WONDERFUL IN CUT ARE THE NEW WAISTS.

fashionable colors. The most stylish house gowns are made of French flannel. But never before at this time of year have so many light grays and tan cloths been made up. Indeed, all the styles of dress this year are on a most elaborate and expensive scale, and it requires considerable thought and ingenuity for the woman with a moderate income to dress according to the latest fashion dictates. Fortunately there are a good many styles in every sort of gown, whether for street or house, that are attractive and quite inconspicuous, and these are the best to choose from where economy has to be considered, while in the black gown the different methods of trimming work a transformation in the too sombre and workaday look that a cheap black gown so often possesses.

Waists Wonderful in Cut.

Truly wonderful are the designs, both of fabric and cut, of the new evening waists which made their first appearance at the Horse Show. Two of the most notable examples are shown in the large engraving. Although much of the material from which they are made comes from the factories of the old world and some of the garments fashioned are upon French models, yet there are many exceedingly handsome ones made here.

As modish as any are those made of satin, but not of a heavy variety, and thus the fulness of a waist is allowed to fit gracefully on the figure. This is tucked, straight, in squares, in diamonds, or hemstitched and drawn. One of the new embroidered styles is made in white mauve and cream. The embroidery is open and loose, and through it is shown a lining of cloth of gold. The style of this waist is really a blouse, but is open at the front and filled in with knots of mousseline de soie or chiffon. The collars are bands of crushed silk, and the remarkable little jeweled buttons which shine through the filmy ruffles of chiffon which edge "all things" add not a little to the general effect. Mauve and other delicate shades of lilac are much used.

Into these waists are inserted yokes or vests, often collars of a plain

York very far forward of the face. The new style of arranging the coiffure which brings it high up in the back means that the hat shall be worn over a full roll in front, not pompadour, but a soft arrangement in which the hair extends very widely at the sides. The hat itself extends far over the face, that is not down, but upward at least from three to four inches beyond the lines of the face, that is to say the new pointed, round hats, toques and other styles which are being shown.

The turban must be poised sufficiently high, and though the hair is being parted and worn apparently softer, there is no squat or flat tendency permitted. The forward inclination of the hat gives a rakish and peculiar, but graceful turn to the entire appearance when not pushed too far. The entire outlines of dress have an attenuating effect. The idea is to make the woman appear taller,



THE NEW PICTURE HAT.

more slender, willowy and graceful. The lifting of the hat and pushing it