

AN ELEGANT CABINET.

When, under the reign of Louis XVI. (towards 1780), the true principles of art began to prevail again, the degenerated and capricious forms of the preceding epoch, under the Régence and Louis XV., disappeared gradually to make room for straight forms of a purer character, suggested by the revival of classical art. Nowhere more than in cabinet work and furniture do we remark this new tendency: classical entablatures replace the contorted forms of the Rococo; caryatides, acanthus leaves, and enriched mouldings in ornolu, plaques of porcelain, painted with pastoral scenes and flowers, cameo medallions in porcelain and glass, are introduced instead of the confused scroll work and unmeaning decoration of the style of Louis XV. The artistic treatment, although somewhat dry and stiff, contrasts agreeably with the unconstructive and degenerated forms of the preceding period; its deficiencies are partly due to the application of cast metal ornament, which replaced almost entirely the carving in wood, partly to the taste and fashion of the time.

The piece of furniture represented here belongs to this style of art, and shows rich ornaments in bronze gilt and inlaid plaques of Sèvres porcelain, *pâte tendre*, with bouquets of flowers.*

Marine Silk.

Among the many novelties which industry obtains from the sea, one of the most curious is the textile product made with the "byssus" of the *Pinnas* of the Mediterranean—the "fin shells" or "sea-wings," as they are called. The species are the *Pinna nobilis*, *P. rugosa*, etc.

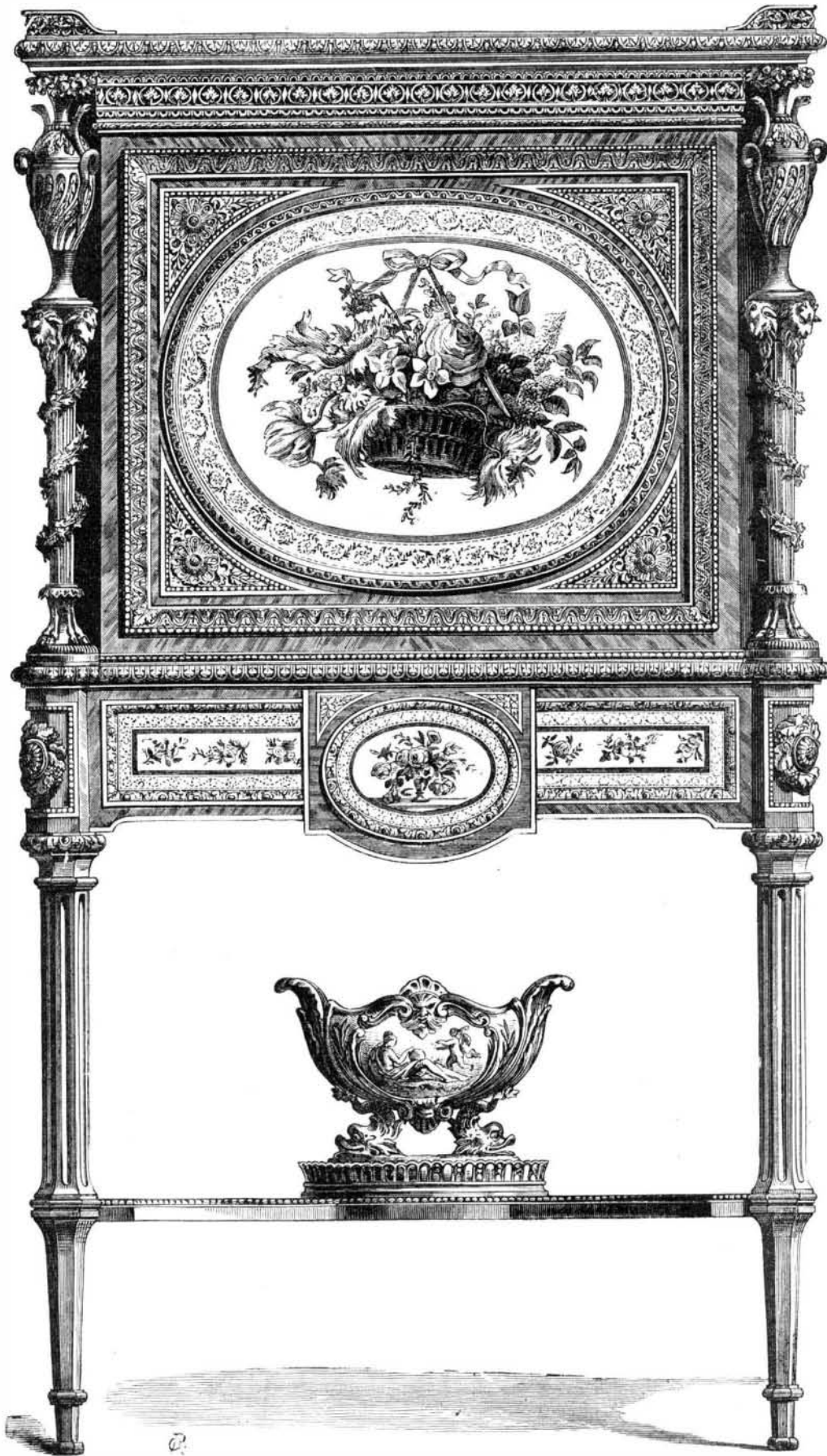
The shells, which are usually very fragile, resemble in form those of the larger species of muscles, being long and tapering, narrow at the back, and gradually expanding to a considerable breadth toward the opposite extremity. There are some twenty or more species of the genus, which produce in large quantities a very fine sort of silky byssus or braid. It is called by the fishermen *lana pinna*, or fish wool. These bivalves are provided with a tuft of delicate fiber, which cannot be better compared than to fine hair or silk, or spun glass; with this they attach themselves to the rocks, living continually under water. The ancients made this material an article of commerce, greatly sought after, and the robes made from it, called "ta-rentine," were held in great esteem. It is said that the scarf of the turban of Archytas was made of this fiber. In the year 1754, a pair of stockings, made of it, were presented to Pope Benedict XV., which, from their extreme fineness, were inclosed in a small box about the size of one for holding snuff. A robe of this material is mentioned by Procopius as the gift of a Roman Emperor to the satrap of Armenia.

Even in the present day the fiber is utilized, but more for its rarity than anything else. The women comb the *lana* with very delicate cards, spin it, and make from it articles which are much esteemed for the suppleness of the fiber, and its brilliant burning gold luster. In Italy the poorer girls and women make from it purses, necklaces, ear rings, etc., and it thus proves a no mean source of income to hundreds of families. A considerable manufactory is established at Palermo; the fabrics made are extremely elegant, and vie in appearance with the finest silk. The best products of this material, however, are said to be made in the Orphan Hospital of St. Philomel, at Lucca.

At both the London and Paris Exhibitions there were shown shawls, stockings, gloves, etc., made of the material. This byssus forms an important article of commerce among the Sicilians, for which purpose large numbers of the *Pinnas* are annually fished up in the Mediterranean, by means of an

* *The Workshop*, Willmer & Rogers News Co. Agents, 31 Beekman street, New York city.

instrument called a "cramp." This is a kind of iron fork with long, perpendicular prongs, about six inches apart. Notwithstanding the extreme delicacy of the individual threads, they form such a compact tuft that considerable strength is necessary in separating the shells from the rocks to which they are attached. The tuft of silk is broken off and sold to the country women, who wash it in soap and water. They then dry it in the shade, straighten it with a large comb, cut off the useless root part of it, by which it adhered to the animal, and card the remainder. By these means a pound of coarse filaments is reduced to about three ounces of fine useful threads. This is fabricated into va-



CABINET IN THE ROYAL PALACE IN MADRID.

THE CATALPA AS A TIMBER TREE.

Nearly a year ago (July 22, 1878), the SCIENTIFIC AMERICAN noticed at great length the claims made by Mr. E. E. Barney, of Dayton, Ohio, in behalf of the catalpa as a tree worthy of general cultivation.

Mr. Barney has now published a second pamphlet, giving additional facts and information with regard to this useful tree, from which we are glad to learn that his efforts have been well rewarded. From every State and Territory in the Union many letters of inquiry have been received by him, and some also from England, South Australia, and New Zealand. What is better, quite a number of gentlemen—

notably, Suel Foster, of Muscatine, Iowa; J. F. Tallent, Burlington, Iowa; and Horace J. Smith, Georges Hill, Philadelphia—have generously engaged in the work of distributing catalpa seeds, especially in the West; and the indications are that the planting of the coming season will result in some millions of trees. The growth of the catalpa is exceedingly rapid, particularly in the rich soil of the prairies.

During the autumn of 1877, the Missouri River, Fort Scott and Gulf Railroad, commenced experimental plantations of various trees on their land, near Fort Scott, in Kansas. The superintendent of the road, in his report to the president on the condition of these plantations at the end of their first year, says: "The catalpa has certainly proved to be the strongest grower, and most tenacious, standing the dry weather better than other varieties, and at present rate will come to maturity years before other varieties are of sufficient size to be of any utility." Last fall 100,000 catalpas were planted by this road. Mr. Barney says:

"I have urged the cultivation of catalpa, believing it will give the largest return in the shortest time. Its economic uses are more varied and extensive than any one tree with which I am acquainted.

"If I had a grove of common catalpa that would not be affected by the frost, I should certainly let them grow. If I wished to plant a grove of catalpa, above or below the frost line, I would most certainly plant only the Speciosa variety, as clearly better adapted to forest culture.

"I by no means ignore the fact that there are other valuable trees for forest culture—notably the white walnut or butternut, black walnut, yellow locust, red and black mulberry, Osage orange, ailanthus, cherry, ash, oak, and many others, of the respective merits of which I leave others to speak.

"At the time I printed my first pamphlet I was under the impression that the examples of durability given were mostly, if not wholly, common catalpa. As it became more and more apparent, on further investigation, that the Speciosa variety was much preferable for forest planting, I felt it to be of the greatest importance to know, beyond any question, that this variety was equally durable."

The investigations made at Mr. Barney's instigation prove beyond a doubt that the Speciosa catalpa possesses the wonderful durability for which the catalpa is noted. The evidence is given at length in the pamphlet, which Mr. Barney will be glad to send to any inquirer for six cents, to cover the cost of printing and postage.

FEATHERS IN TEXTILES.—According to the Paris *Figaro*, the shops will soon have the new textiles in feathers and wool and cotton on sale. This is an invention of M. Bourguignon, of Donchery, who has found how to weave feathers (deprived of the horny substance) and incorporate them with woolen and cotton yarns in proportions varying from 10 to 75 per cent. Some very fine textiles are thus made, and especially a flannel which for warmth and lightness is unapproachable.

rious articles for the person, such as shawls, stockings, caps, waistcoats, gloves, etc. The web is of a beautiful yellow brown, resembling the burnished golden hue which adorns the backs of some splendid tropical flies and beetles.

A Large Orange Tree.

The *Florida Agriculturist* describes, as the biggest orange tree in that State, one at Fort Harley, near Waldo. Its height is 37 feet, circumference at top 81 feet, circumference of trunk just above ground 8 feet 5 inches. At a foot from the ground it branches into four trunks, measuring respectively 37½, 39½, 40¾, and 43 inches in circumference. Each of these fork from three to five feet above ground, and again higher up. All are bare of small limbs and foliage for many feet up, except on the outer sides, so that the interior of the tree presents the appearance of a huge umbrella.