#### PARIS EXPOSITION-AUSTRIAN PALACE.

The Austrian Palace is next to that of the United States in the group of national buildings facing on the Seine. It represents a type of architecture which prevailed in Austria during the eighteenth century, known as the "Barocco" style. The portico above the main entrance has two columns on each side, and above the balustrade rise a corresponding pair of pilasters supporting the roof cornice; on either side of the

portico is a narrow window, with ornamental iron work, having in front a richly ornamented vase. The main façade has also a very handsome fountain on each side, which adds greatly to the effect; the upper basin, surmounted by a sculptured group, is of shell-form, and from this the water falls into a large basin below. On the sides and rear of the building the lower windows are semicircular form, surmounted by grotesque heads; above, a series of pilasters rises to the upper cornice. The roof is bordered by an ornamental balustrade, interspersed with trophies, with the Austrian eagle on each corner; in front, upon the cornice, is seen the national coat of arms. Ornamental shrubs are placed around the building; in the front is a handsome balustrade at the edge of the quai, with a large group at either end. The sub-structure consists of several arches of solid construction, ornamented with grotesque heads,

A flight of steps leads to the main vestibule; on each side is a piece of ancient tapestry, in front of which is a large bronze

bust. That on the left represents the Emperor Francis I., and that on the right the Empress Maria Theresa; both busts were executed by Messerschmidt, in the eighteenth century. A second flight of steps leads up to the main rotunda, from which rises the handsomely ornamental staircase, shown in the illustration, leading to the upper story. To the right of the main rotunda is a circular reception room, richly ornamented and furnished; the mantel is in carved onyx and the central table has a top in polished onvx five feet in diameter. The room contains a fine marble bust of the Emperor Francis Joseph, surrounded with ornamental plants. The corresponding room to the left is finished in Empire style, with mahogany panels rising to the ceiling. It has a frieze in oil, representing allegorical subjects, and contains two paintings by Austrian artists. On one side

of the rotunda are two cases containing manuscript music of Beethoven, Mozart, and other musicians; here are also a number of fine bronzes, including an equestrian figure of the Emperor Leopold I. in antique bronze. In the rear is a handsomely furnished room containing views of Vienna; the corresponding room on the right contains a collection of the headings of all the principal Austrian journals, arranged in cases, and also a collection of ancient newspapers; one of these, the "Diarium" of Vienna, dates from 1758. On the right side of the rotunda are a number of cases representing the postal and telegraph service of the Austrian government. In one of these are seen various models of city letter boxes.

# Scientific American.

pouches, marking stamps, etc., and models of different types of postal wagons. Another case represents the telegraph instruments used, showing keys, Morse registers, cables, batteries, etc., and a third case contains telephones and cables. Opposite is a Hughes printing telegraph with electric motor. A large room in the rear is devoted to the exhibits of mineral waters of Austria, with views and photographs.

The rooms of the upper floor open into the rotunda

## **SEPTEMBER 22, 1900**.

from Spain has resulted in a great falling off of the industry, which would have probably declined entirely if it had not been for the discovery of iodine, which saved the kelp trade from extinction for a time, but finally iodine was obtained in large quantities from Chile as a by-product of sodium nitrate, and this succeeded in materially decreasing the commercial value of kelp. Kelp was formerly made of two kinds of weed, the fuci and the laminaria. Kelp is now made en-

tirely from two kinds of driftweed, of which "tangle" is less susceptible to deterioration than the other varieties. It is torn up and driven ashore during the winter gales. It is collected and stacked in heaps usually on foundations built of stones rounded by the action of the waves. It is arranged so that air will have free access to the heaps.

The burning usually begins in May, provided there has been no wet weather, and continues during the summer months. The kilns are made of sods or stone. and, according to The English Mechanic, vary from 12 to 20 feet in length, and from 2 to 3 feet in breadth, and 1 foot in depth. They are usually built on a plot of grass and are fed with the dried weed which yields about a fifth of its weight of kelp. The fuel is placed in the kiln and the seaweed is spread lightly over it. The seaweed is stirred constantly until the kelp is in a semi-fluid state, glowing like molten metal. It is then allowed to cool, and when taken out of the kiln appears as a hard, heavy substance of a dark gray color. It is then broken

by a series of arches; those in the rear contain a collection of paintings by Austrian artists; in another room is seen a silver plaque offered to the Emperor Francis Joseph by Arthur Krupp on the occasion of the Jubilee of 1898, and a gold writing set presented by the Emperor to General de Beck, chief of the Etat Major Another room contains a collection of wearing

GRAND STAIRCASE, PALACE OF AUSTRIA, AT THE PARIS EXPOSITION.

Major. Another room contains a collection of wearing apparel, embroidery, arms, and other objects from different regions, including two life-sized figures representing inhabitants of the Ragusan district.

#### Kelp Burning in the Hebrides.

The manufacture of kelp from seaweed was at one time an important source of revenue in the highlands and islands of Scotland. Large quantities of it were required in the last century for the manufacture of soap, glass, and alum. The introduction of barilla into pieces of suitable sizes and it is shipped to market. In Norway the kelp is burned to ash and it realizes its full value.

### The Movement of Swiss Glaciers in 1899.

Prof. Forel, Prof. Lugon and Herr Muret have just completed a report upon the movement of the glaciers in Switzerland during last year. Seventy-three glaciers in all were observed; in ten cases there had been an advance, and in sixty-three cases a retreat. The tendency of glaciers to diminish is thus rendered evident. The glaciers which had increased in 1898 remained stationary in 1899. The only Swiss glacier which manifests a steady and certain increase is the Glacier de Boveyre in Canton Valais. The two Grindelwald glaciers, which until recently were decidedly stable, have begun to decline. The lower Aar glacier,

which remained stationary until 1893, has now retreated 75 feet. On the Eiger glacier, for the first time since it was measured, a diminution was observed; it has retreated 230 feet. Out of thirty glaciers observed in the Valais twentytwo have shown a decided retreat during the year, three a probable decrease and only four an evidence of increase.

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THE first trip over the third-rail





THE PALACE OF AUSTRIA, "STREET OF NATIONS," PARIS EXPOSITION.

line of the Albany and Hudson Railway, of Hudson, N. Y., was made on August 20. Power for operating the road was obtained from the company's new waterpower plant at Stuyvesant Falls, and the test was satisfactory in every respect. It is stated that a speed of 60 miles an hour was made at tin.es.