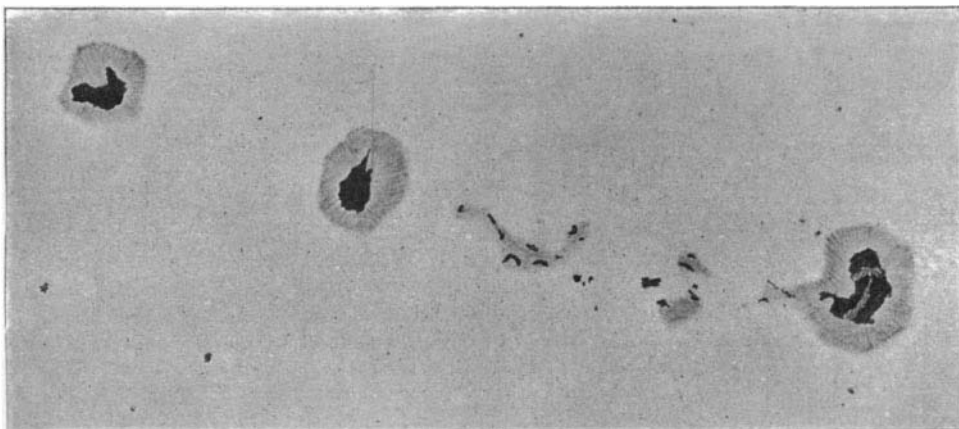


SOME RECENTLY OBSERVED SUN SPOTS.

To the Editor of the SCIENTIFIC AMERICAN :

I inclose a sketch of a large group of sun spots as seen on February 13, 1898, 12 M. The group was visible to the naked eye as a black dot near the center of the disk. A severe storm obscured the sun until Friday, February 18, when the group was found to have changed. The largest spot, that on the right in the sketch, had split into four. The appearance of such a large group at this time of solar inactivity is interesting, in view of the severe storms now raging throughout the Northern States.

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SOME RECENTLY OBSERVED SUN SPOTS.

England's Book Output.

The Publishers' Circular says that the output of books during the past year was larger by some 1,400 tomes than in 1896. In theology there is a rise of about 100 books, and in education 160, while politics and commerce show the notable augmentation of 300 books. While the demand for light reading also grows, the total increase in fiction is not so great as was expected. Travels and poetry are much the same as last year. The total number of books and new editions published in the past twelve months is 6,573. The smallest number is on law, 140, and the largest is novels, 2,677. There is revived interest in theology, while the arts and sciences show a falling off.

THE "APENNINO" OF GIOVANNI BOLOGNA.

About nine miles from the Porta San Gallo, of Florence, on the road to Bologna, are the remains of the Villa of Pratolino, built in 1569, by Francesco de' Medici, son of Duke Cosimo I., from the designs of Bernardo Buontalenti, for the reception of Bianca Capello the Venetian. It was her favorite place of residence, and here she devoted herself to magic and the composition of philters. After her death a room was shown where it was said she used to distill a cosmetic from the bodies of newly born infants; of course this is improbable, but an old Italian villa would lack interest in the eyes of the country folk if it did not have some legend attributing horrible crimes to the former occupants. As the home of Bianca Capello, Pratolino was extolled even by the poet Tasso. The villa has long been in ruins and the park is now a great picnic resort of the Florentines who are out for a holiday, and about the only relic of former splendor is the colossal crouching figure of stucco, 62 feet high, representing the "Genius of the Apennines" and very generally attributed to Giovanni Bologna.

During the golden age of the Italian Renaissance, there were already many signs of decadence. Painters and sculptors made abstract and incoherent works. They were constantly striving after the colossal and the effects of *trompe d'oeil*, until at last they became improvisators, and the excessive facility of the cinquecentists reacted unfavorably as regards, not the quantity, but the quality of their work. Collaboration was abused, leading the really great men to become merely what in music would be called an "impresario," and, finally, nothing was left but a great army of mediocrities, who only assisted in the downfall of public taste. This straining after the unnatural and the grotesque really dates from the time of Raphael and Michelangelo. The latter even considered the idea of shaping

a peak in the mountains of Carrara into the semblance of a giant; fortunately, the scheme was not carried out.

St. Christopher, the colossus par excellence of the middle ages, soon became degraded to the proportions of a local saint, patrons insisted on the artists affecting the colossal, and the Polyphemes of the Villa Madama of Giulio Romano and his giants of the palace of Té at Mantua, and last, but not least, Giovanni Bologna's

giant, are examples of the result of this longing for the immense.

Giovanni Bologna was not an Italian, but was born at Douai, in 1530. This city was then a part of the Low Countries and therefore he is sometimes known as "Il Fiammingo." He early went to Rome to study sculpture and afterward stopped in Florence, where, enjoying the friendship of Bernardo Vecchietti, the goldsmith and bronze caster, and the patronage of Francesco de' Medici, he made rapid strides in his art and soon he was known as the creator of masterpieces. He died in 1608 and is buried in the church of the Annunziato at Florence.

We need only concern ourselves with the "Apennino," or "Jupiter Pluvius" as it is often called. The statue is unfortunately in a ruinous condition; it is placed at the end of the terrace and faces the villa. If the giant were suddenly to be endowed with life, when he rose, like Rip Van Winkle, from his long sleep of four hundred years, he would be 104 feet tall. The god crouches, grasping the rock with one hand, while

execution of the colossus for the petty sovereign and his favorite he demonstrated his ability to grasp the large and monumental as well as the small work of the goldsmith's shop.

Pitchers in Plants.

Prof. S. H. Vines gives a useful résumé of the present state of our knowledge of the structure and function of pitchers in plants. The known examples belong to the orders Sarraceniaceæ, Nepenthaceæ, Asclepiadaceæ, Saxifragaceæ and Lentibulariaceæ, with which may also be associated the underground scales of *Lathræa* (Scrophulariaceæ). In the great majority of cases these structures are traps for insects; while others have apparently no such function. Among insect traps, the greater number (Sarraceniaceæ, *Genlisia*, *Utricularia*) appear to be incapable of digesting the insects which they capture, absorbing only the products of the decomposition caused by micro-organisms; these therefore are not correctly termed carnivorous plants. The pitcher of the various species of *Nepenthes*, and possibly also that of *Cephalotus* (Saxifragaceæ), undoubtedly secretes a digestive enzyme. When pitchers are not insect traps, they have some function in connection with the supply of water to the plant; either relieving it of an excess of water which it may have absorbed, or storing it up for future use.—*Journ. R. Hort. Soc.*, 1897.

The New Appraisers' Stores at New York.

The Appraisers' Stores at Washington and Lighthouse Streets, New York City, which have cost about \$3,000,000, will be ready for occupancy on April 23. The work was begun on the Stores in 1890 and the immense building is now practically complete. It is the most convenient building in this country and occupies an entire block. It is ten stories high and is equipped with every known device for easy and speedy handling of goods. In the center of the structure are ten freight elevators, with a lifting capacity of 84,000 pounds. These elevators are reached by a driveway with an entrance and exit, so that the trucks can load, unload and leave the building without turning around and without getting in each other's way. All goods will be received on the ground floor, which is equipped with trolleys, cranes, hoisting blocks, etc. The building, having light on every side, gives the best possible opportunity for examining goods and determining the quality. There are over a hundred telephones in the building and pneumatic tubes facilitate the delivery of messages to every part of the building. There are over three miles of corridors in the great structure. Splendid vaults are provided for the storage of valuable goods such as jewels. The building has many special features, such as a cold storage room of 3,000 square feet for tobacco seized or held for an adjustment of



GIOVANNI BOLOGNA'S COLOSSAL STATUE CALLED THE 'APENNINO' AT PRATOLINO

duty. The laboratory occupies two sides of the top floor and in it all the chemical tests will be made. It is believed to be the largest commercial laboratory in the country and possibly in the world. The new building will enable the appraiser and his assistants to carry on their work with the greatest dispatch and with a minimum of expense, and the importers will probably not now have any just complaint of delay or improper handling and storage of their goods.

with the other he presses a point of rock above the head of a marine monster, which is still readily distinguishable notwithstanding its dilapidated condition. The hair and the beard of the colossus descend like stalactites on his shoulders and breast. It is necessary to be architect as well as sculptor to execute a work of this kind, and Giovanni Bologna shows that he was a great artisan and artist in constructing so solidly and in such just proportion this prodigious work. In the