length of main-mast will be 62 feet above deck; length of main-top-mast, 44 feet; main-top-gallant-mast, 23 feet; main royal-mast, 15 feet 4 inches; gaff, 27 feet; length of fore-mast above deck, 57 feet 2 inches; length of main-top-mast, 41 feet; top-gallant-mast, 21 feet 4 inches; royal-mast, 14 feet 3 inches; gaff, 27 feet; length of mizzen-mast above deck. 55 feet; length of mizzen-top-mast, 31 feet; mizzen top-gallant-mast, 15 feet; gaff, 32 feet; length of bowsprit, 25 feet 6 inches; jibboom, 21 feet; flying-jibboom, 17 feet. The Nipsic will be classed as a third-rate, and will carry four nine-inch broadsides, one eleven-inch pivot, and one 160 pounder; but, should it be thought necessary, four additional guns can be mounted. She will be propelled by compound engines, driving a Hirch's four blade screw, of fourteen feet diameter.

THE SWISS HOUSE AT THE PARIS EXPOSITION.

Our engraving, which we take from the London *Graphic*, represents the *façade* of the Swiss house on International street, in the Paris Exposition The building itself is thoroughly Swiss in its construction, being of wood tastefully colored and ornamented with the arms of the various cantons. The front is composed of three arches, that in the center serving as the entrance, and those at the sides being filled with stained glass. Above the center arch is a clock, above which stand two figures of men in armor, who strike the hours, half hours, and quarters. The illustration shows the usual large crowd which gathers whenever the clock strikes, to witness the movements of the automata.

The Ingenuity of Bees.

The Cincinnati Society of Natural History has begun the publication of a journal of its proceedings; and, in the first number, just issued, we find the following interesting note, by Mr. V. T. Chambers, on the method adopted by some bees of reaching the nectary of flowers. That humble bees frequently pierce the corolla of flowers, near its base, with their proboscis, which they then insert into the opening thus made, has long been known, and frequently mentioned. Indeed it is the usual way taken by these bees to reach the nectary when the corolla is too long for the tongue to reach the nectary from the mouth of the corolla, unless, indeed, the flower is a very large one—large enough for the bee to enter its mouth and reach the nectary in that way. Mr. Chambers remarks that if the same practice obtains with hive bees, he does not remember having seen the fact stated, and so records the following observation.

A large bush of *Weigelia rosea* was literally covered with flowers in all stages, from the unopened buds to those that were withered and ready to fall; and great numbers of bees swarmed over them—humble bees, hive bees, mason bees, and sweat bees (*Andrenidæ*). The older flowers were each pierced near the base by a longitudinal slit, made by hive or bumble bees, which had previously visited them; and, whenever one of these bees alighted on one of these flowers, it immediately went, without attempting to enter the corolla, to the base of the flower and inserted its proboscis into the slit already made; or, if the flower was a fresh one, having no slit, it proceeded immediately to make one. By the humble bees this was instantly effected without trouble, but to the hive bees it seemed to be more difficult—probably because the blades of the maxillæ, which are used to make the slit, are weaker or more flexible than in humble bees.

Of the numerous hive bees observed, only a single one attempted to enter the mouth of the corolla, and it came out without going further than just within the opening. On the other hand, the mason bees and sweat bees went in every instance straight into the mouth of the flower, and never attempted either to make a slit or to use one that was already made. Yet one of these mason bees (*Megachile*) was fully as large as the hive bees.

ASTRONOMICAL NOTES.

BY BERLIN H. WRIGHT.

PENN YAN, N. Y., Saturday, July 13, 1878.

The following calculations are adapted to the latitude of New York city, and are expressed in true or clock time, being for the date given in the caption when not otherwise stated.

PLANETS.

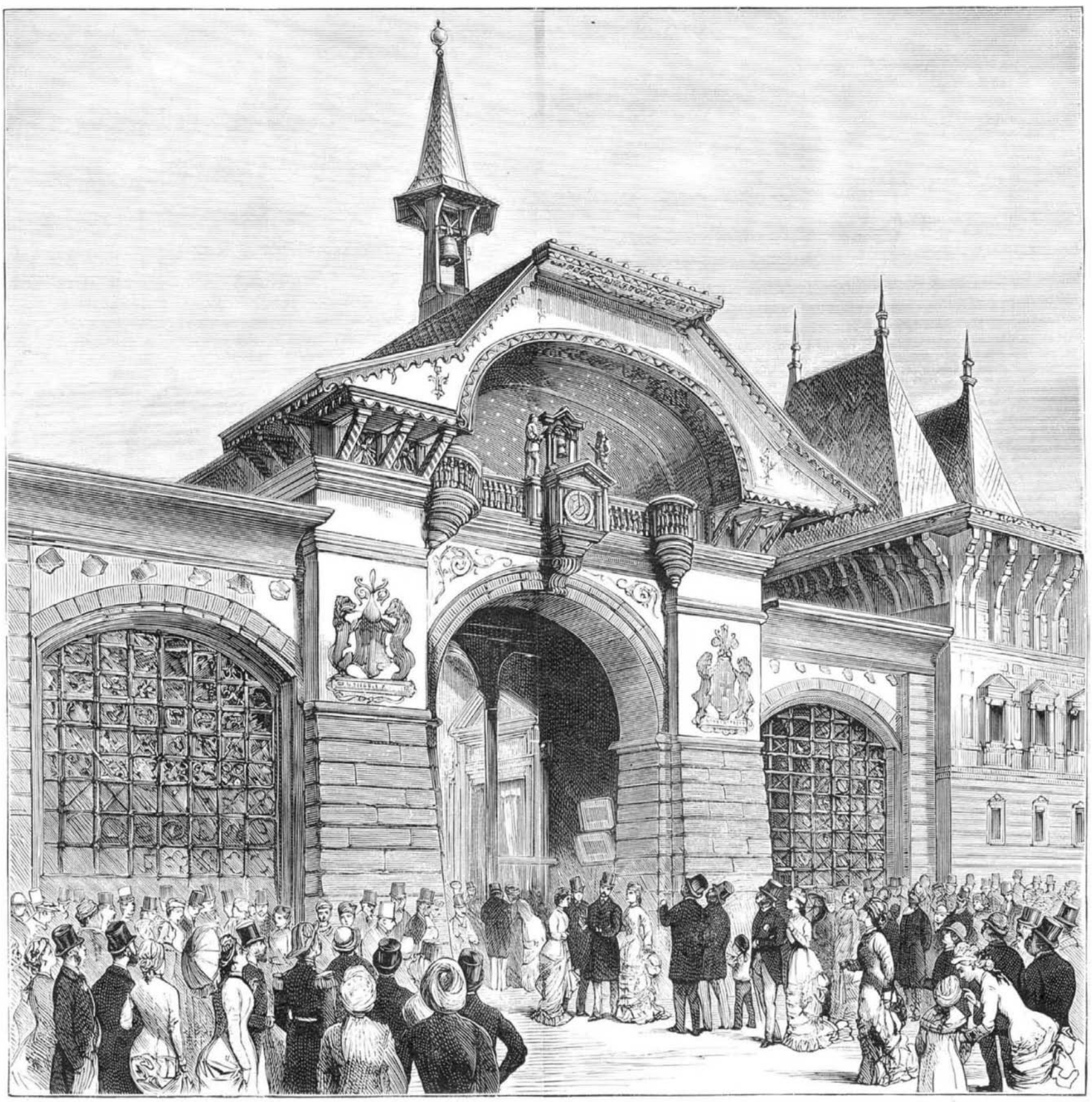
	H.M.		H.M.
Venus rises	2 14 mo.	Saturn rises	10 49 eve.
Mars sets	8 42 eve.	Uranus sets	9 19 eve.
Jupiter rises	8 10 eve.	Neptune rises	0 20 mo.
Jupiter in meridian	1 01 mo.		

FIRST MAGNITUDE STARS.

	H.M.		H.M.
Alpheratz rises	8 44 eve.	Regulus sets	9 19 eve.
Algol (var.) rises	10 24 eve.	Spica in meridian	5 52 eve.
7 star (Pleiades) rises	0 47 mo.	Arcturus in meridian	6 43 eve.
Aldebaran rises	2 06 mo.	Antares in meridian	8 55 eve.
Capella rises	11 30 eve.	Vega in meridian	11 05 eve.
Rigel rises	4 13 mo.	Altair in meridian	0 21 mo.
Betelgeuse rises	3 58 mo.	Deneb in meridian	1 13 mo.
Sirius	invisible.	Fomalhaut rises	11 24 eve.
Procyon	invisible.		

REMARKS.

Jupiter and the moon are in conjunction July 15, 3h. 58m. morning. This will be an occultation on this continent between 16° + and 62° — lat., and here will be a very near approach, Jupiter being a trifle north of the moon. Saturn becomes stationary July 15, after which date it will retrograde, moving westward in the constellation *Pisces*. A line connecting the two eastern stars in the Square of Pegasus (Alpheratz and Algenib) and produced southward 16°, reaches Saturn, situated in a starless region. Algol at minimum July 16, 5h. 59m. morning, and 18, 2h. 48m. morning.



THE SWISS HOUSE AT THE PARIS EXPOSITION.