

so established may be used as a working hypothesis in physical investigations, so far as it predisposes us to seek for law and order in all parts of creation. But it must not be dealt with as an absolutely true principle, if for no other reason at least for this, that it has not been found practicable to define its meaning with precision. And especially we must take care not to assume it even as an hypothesis, except in cases in which it is quite clear that nothing but physical causes are concerned. Which last consideration should be regarded as a warning, that the introduction of the principle into theological questions may very possibly lead to most erroneous conclusions."

*Contemporary Review* (Oct.) Cardinal Newman replies in a very spirited manner to Principal Fairbairn's criticisms in the May number on his "Apologia," under the title, "The Development of Religious Error," claiming that he has been shockingly misrepresented. The Duke of Argyll discusses the Irish Question, "Land Reformers," in a sensible and intelligent way. The results of the last "Irish Land Act" are anything

but hopeful, according to his showing. He holds that it is a fatal blow to ownership—that "an arbitrary re-adjustment of rents every fifteen years" will work incalculable mischief to ownership. "The consequence of this legislation now is that the State is placed in the ridiculous position of having to offer a large bribe to induce men to purchase land in Ireland, although of all countries in the world it is the one in which 'land hunger' most extensively prevails. Moreover, this bribe is offered, not to capitalists, but exclusively to the existing tenants, who, over a large part of Ireland, are notoriously impecunious. I do not know whether that bribe will succeed or not. My own impression is that it will not, and that for the simple reason that until rent is restored to its natural position—until the State ceases to regulate price through the intervention of a body purely arbitrary in its actions—no confidence can be restored to men who seek to own the commodity which is subject to such a process. The ownership of land in Ireland has become unsaleable, because the law has made it a worthless article."

## PRACTICAL ASTRONOMY.

By ROYAL HILL.

NOVEMBER 1st, 8 P. M.—As we take our stand facing the south this evening, we have before us the Zodiac constellation Aquarius—The Water Bearer—that of Capricornus having passed to the west. It is a very large and irregularly-shaped constellation, across the middle of which the sun journeys between the 14th days of February and March. It extends very nearly up to the star Enif, now an hour and a quarter past the meridian, about two-thirds of the way up the sky, and almost touches the first magnitude star Fomalhaut, which we see low down in the sky, within six minutes of its meridian passage. The faint stars in Aquarius above Fomalhaut seem to be disposed in lines trending to the south-east; and it is these which probably suggested the idea of water flowing from an urn, and, therefore, the name of the constellation.

Directly above Fomalhaut, but very much higher in the sky, are two stars, now within a few minutes of their meridian passage. The lower of these two is Markab; the other, about fourteen degrees higher, is named Scheat. They are the first two stars of the well-known Square of Pegasus, and are of the second magnitude. The other two, forming the Square, are just one hour to the east of these; the lower one being Algenib, of the third magnitude, and the upper one Alpherat. Of these four stars, Markab, Scheat and Algenib are in Pegasus, and Alpherat, which is the brightest one, is in the constellation of Andromeda. An imaginary line drawn from Markab through Alpherat is somewhat remarkable as including five notable stars, all of the second magnitude, and situated at about the same distance from each other. These are as follows: Markab in Pegasus, Alpherat in An-

dromeda, Mirach, and then Almach, also in Andromeda, and last, Mirfak, in the constellation Perseus. Another interesting object situated in this region of the sky, can be now easily identified. It is the Great Nebula of Andromeda, in the middle of which a faint star has lately appeared, only to fade away after a few weeks of comparative brilliancy. The Nebula, which presents the appearance of a faint patch of light—something like the tail of a small comet—is situated about one-third of the way on a line drawn from Alpherat to the constellation Cassiopeia, and somewhat nearer to the star Mirach than it is to Alpherat. It is the largest nebula visible to the naked eye in the northern heavens, though not so bright as the one in Orion.

Turning to the north, we see the Pointers exactly below the Pole. Most of the faint stars seen above the North Star are in the constellation Cepheus. This mythological king seems to have been greatly honored by the ancient astronomers, as his Queen Cassiopeia and their lovely daughter Andromeda, and her lover and husband Perseus, each have a beautiful constellation named after them, forming quite a family tablean in this part of the heavens.

The constellation Perseus, which we have just identified by its principal star, Mirfak, is one of the most beautiful in the sky, being very rich in small stars that are crowded along a line in the centre of the constellation, and on the edge of the Milky Way. It also has a large and well-defined cluster of very small stars, called the Cluster in the Sword Handle. It can be seen between Mirfak and Cassiopeia. The account of a still more interesting feature of this constellation we will defer till December.