MARTIUS quid caelebs agam? asked old Horace. Mar-M. tins quid caelebs agat? What is the Martian inhabitant doing? asks Mr. Percival Lowell. The answer is as

Mars.\*

peculiar as the question. He is digging canals. If the acqueductors in Toronto wish for a precedent, let them look to Mars for support. According to Mr. Lowell, canals in Mars can be and are dug every year, possibly twice a year, to which the Georgian Bay canal is a trifle. It may interest

our readers to furnish the steps of the argument.

1. Mars has an atmosphere. This is proved by observation of the disappearance of polar snows on the planet. It is also proved by the fact that measurements of the equatorial diameter of Mars in a given period were affected by influences which did not affect the polar diameter. atmosphere is supposed to be cloudless, and thereby the climate of Mars is made astonishingly mild. Thus the planet would be destitute of weather. There could be no storms, no palpable wind, little rain or hail. Further, this thin air is not incapable of supporting life and its constitution does not differ greatly from ours.

2. "After air, water. If Mars be capable of supporting life, there must be water upon his surface; for to all forms of life, water is as vital as air." Mr. Lowell concludes that Mr. Lowell concludes that there is water and plenty of it. The ice caps at the pole of Mars were observed to melt. As the ice field decreased the border of darkish colour around it diminished also conforming in size and shape to the decreasing cap. In the places where the ice cap and circumfluent polar sea were, there came one ochre stretch of desert. Therefore there is water on the surface of Mars. It is ephemeral. It exists while the ice-cap

is melting, and then it vanishes.

What becomes of this water? Are there other bodies of water on the planet? To answer these questions requires a knowledge of areography, a word coined on the same basis as ge-o-graphy-it means a knowledge of the surface of Mars. "Martian Geography" is the simplest, though an incorrect, explanation. This areography has been studied since 1659, and no main feature on the planet's surface has been known to change since then. Mr. Powell takes us on a journey round Mars so that we are able to learn all his prominent features exactly as if we sailed round him in a balloon. The survey shows that there is, on the whole, a level surface. This surface is covered by patches of different tints. The white caps are snow. Amid this snow are ice peaks, and from these peaks flash across space to us on earth a glint of sunshine as the sun sets. These glimmering points are the "signals" we all heard so much a year or two ago. They were not signals to us in particular. They were Nature's own light shining across the abyss of space to our petty planet in common with others. But they are signals to us in another sense. They teach us of the existence of physical features in Mars similar to those on our earth. Then, besides this snow and ice are blue green areas supposed to be seas, with reddish ochre patches of desert. Mr. Powell is positive that the ochre represents desert. He doubts that the blue green areas are seas. He thinks they are oases where vegetation is growing, and that the changes in tint are the changes as the vegetation progresses. Lastly, the examination of the surface shows the canals of which we have all heard so much. Mr. Powell's book is illustrated by plans which shew these canals. They are not only single but double, and what is more parallel. They are also like the Czar's railway which followed the line of a ruler-the Czar himself is not meant by the last word; -they are perfectly straight and stretch for hundreds of miles. This fact brings us to point number 3.

We have atmosphere. We have water. Now we have tem of canals. The broad stripes are not supposed to be a system of canals. the canals themselves, but wide strips of vegetation caused by irrigation. The point insisted upon that this irrigation shows evidence of design. Hence, the sequence of argument. The planet is capable of being inhabited and the existence of these canals on a definite plan shows that it is inhabited. This is briefly the conclusion arrived at by Mr. Powell. That a grave and learned man, in a responsible position, should

\*"Mars." By Percival Lowell. Fellow American Academy: Member Royal Asiatic Society, Great Britain and Ireland, etc. Boston and New York: Houghton, Mifflin & Co. The Riverside Press, Cambridge. 1895.

his major works by virtue of its somewhat elaborate com-position, and unusual diagonal disposition of lines. On its right is a Daubigny of the second rank, more conspicuously true than beautiful, faithful than imaginative. Diaz which follows leaves nothing to be desired, and is an exquisite glimpse of sylvan Arcadia, rhythmically composed and sombrely harmonious in colour. In all humility I estimate mate the large Rousseau which follows a good deal lower than do the cognoscenti who shared with me the responsibility of hanging it. I am sufficiently familiar with the works of Rousseau to feel some confidence in hazarding the opinion that this is an unfinished work; and although his technical method was undoubtedly to establish his picture on a somewhat flimsy basis of charcoal drawing and colour thinly rubbed in with terpentine (or other useful medium) this method of procedure is very much more discernible in the present case than it is ordinarily. Unquestionably the trees are nobly grouped and drawn, and the whole inspiration—the most of Rouse the motif—is very fine, but I think that in justice to Roussean it may be contended that the arbitrary outline of the against the sky and the flat and lifeless blue of the sky itself are to be accounted for on the ground that they are incomplete. The "Forest Pool," by Diaz, has a good deal of the of the charm with which the painter invests his woodland scenes, but, unlike his figure picture, it is lacking in the quality of repose. The fine colour of the Monticelli I have already spoken of. The Troyon, while unpretending in size, is a little masterpiece in its way; and the cattle, roaming at land the masterpiece in its way; and the cattle, roaming at large in a wild pasture, have an air of Nature which is tion of which the highest painterly gifts have conduced; and both it and the Mauve are unique as colour schemes in pearly grey. But the piece de resistance in this galleryperhaps in the exhibition—is the big sky, receding into infihite space, which inspired the genius of Michel. But I must resist the inclination to dilate again on the merits of this priceless work.

Turning to the hall we meet the portrait of the Duke of Wellington, already referred to last week, which is a very able painting of a very great personality; and, inasmuch as that it gives a slightly different reading of the face from the

average portrait, it is probably the more sincere and reliable. There is no better piece of painting, in its way, than Ribera in the hall. "Aaron and the Budding Rod" is the somewhat misleading title for what is a frankly realistic. stic study of the picturesque head of an old man. If Rib-era had been gifted with some of Watt's idealism—that high orden as a contract theme. order of imagination which is fired by an exalted themehe would have given us nobler types for his Aarons and St. Jeromes and would have painted more than the mere outward aspect of the snuffily picturesque old parties who "sat or the 'eads of 'is 'oly\_men."

E. WYLY GRIER. for the 'eads of 'is 'oly men.

Three well known American artists, Walter McEwen, Prederick Macmonnies, and Carl Melchers, have lately had conferred on them the decoration of the Legion of Honor. This order is presented by the French government twice a year, on New Years' Day and on the 14th July (the anniversary of the storming of the Bastille), to those who have especially distinguished themselves in various ways in science, iterature, art or commerce, as diplomats or on the field of battle, in fact for any conspicuous service to France.

Walter McEwen, of Chicago, was the pupil, abroad, of Cormon and Fleury, and after winning various honors was declared in 1889 "hors concours," and could win no more made. medals in Paris. His decoration in part of the Liberal Arts Building at the World's Fair, has made him famous, and he has lart has lately sold a picture, "Une Famille Hollandaise." to the Belgian Government.

Carl Melchers, born in Detroit, Boulanger and Lefebre, and has devoted himself entirely to studied the study of Dutch peasant life. He also decorated part of the Manufacturers Building, and has been presented with medals wherever he has exhibited.

Frederick Macmonnies, the sculptor, was a pupil of St. Gandens Widman, in Munich, and Falguiere, in Paris, and in 1891 was also declared "hors concours" in Paris. Columbian fountain, at the World's Fair, was his work, and it was thought at the time that he would have been decorated for it.