

"Then what makes it colder?" pursued the remorseless man in the corner.

The man in thin clothes wiped the beaded perspiration from his pallid brow, and said slowly he guessed "it was the ice."

"What ice?" demanded the inquisitor.

"Why," the victim said, with every symptom of approaching dissolution apparent in his tremulous voice, "the ice that was—frozen—frozen—by the frost."

"Did you ever see any ice that wasn't frozen?" howled the man in the corner, in a fine burst of derision.

The man in thin clothes whispered that he wished he was dead, and said, "No: that is, he believed he didn't."

"Then," thundered the man in the corner, "what are you talking about?"

The man in thin clothes then made an effort to brace up, and spicily replied that he was trying to "talk about weather?"

And what do you know about it!" triumphant-ly roared the man in the corner.

"The man in thin clothes lost his grip again, and feebly said that "he didn't know very much about it, that was a fact." And then he tried to be cheerful and work in a little joke about nobody being able to know much about the weather, but the man in the corner sat down on him with a tremendous outburst.

"No, sir! I should say you didn't. You come into this car and force yourself on the attention of a stranger, and begin to talk to me about the weather, just as though you owned it, and I find you don't know a solitary thing about the matter yourself selected for your topic of conversation: you don't know one thing about meteorological conditions, principles or phenomena. you can't tell me why it is warm in August and cold in December; you don't know icicles form faster in the sunlight than they do in the shade; you don't know why the earth grows colder as it comes nearer the sun: you can't tell why a man can be sunstruck in the shade; you can't tell me how a cyclone is formed nor how the trade winds blow; you couldn't find the calm centre of a storm if your life depended on it; you don't know what a sirocco is nor where the southwest monsoon blows; you don't know the average rainfall in the United States for the past and current year; you don't understand the formation of fog, and you can't explain why the dew falls at night and dries up in the day; you don't know why the wind dries the ground more quickly than a hot sun; you don't know one solitary thing about the weather, and you are just like a thousand and one people who always begin talking about weather because they don't know less about weather than they do about anything else in the world."

And the man in the corner glared up and down at the timid passengers in the South Hill car, but no man durst answer him. And as for the man in the thin clothes, he didn't know for the life of him whether he had a sun-stroke or an ague chill. He only knew that it seemed about twenty-seven miles to the Jefferson street crossing.—*Burlington Hawkeye.*

"Down with the Weather Bureau!" will be the political war-cry some of these days, if things keep on as they have been going of late years. Ever since "Old Probabilities" was set up in business the weather has been getting worse and worse, and not only that, but there has been a good deal more of it. The time was when such a thing as a cyclone had never been heard of out west, but since the Signal Service sharps have got to meddling with the weather clerk's business all sorts of newfangled things have been introduced. Winters used to be cold and summers hot, but now you cannot depend upon their being anything—except something entirely different from what you have a right to expect. "The dollar of our daddies" has had its day; let the war-cry now be, "The weather of our great-grandfathers!"

Are the Planets Inhabited?

A curious discovery, made by Signor Schiaparelli, Director of the Royal Observatory at Milan, seems to start again that old and unanswerable question, "are the planets inhabited?" This Italian astronomer is one of the most assiduous watchers of the planet Mars. It was he who in 1877-78, first detected the many dusky bands which traverse and subdivide the ruddy portions of the Martial orb. Again in 1879-80, when the position of the planet was favourable he re-identified these strange lines; but during last January and February he has been able to observe and map out in more than twenty instances duplications of the dark streaks "covering the Equatorial region of Mars with a mysterious net work, to which there is nothing remotely analogous on the earth." The Italian astronomer has styled them "canals," for they bear the appearance of long sea-ways, dug through the Martial continents, as if a mania for short cuts had seized the inhabitants of the planet, and everybody residing there had become an active M. deLesseps. We have written "everybody residing there," but that is precisely the puzzling question which man always asks of science, and which science cannot answer. Dwellers upon this earth are tormented with such a curiosity as must have possessed the primitive tribes of some Pacific island, when they looked across the blue deep and wondered if the specks of land which they saw on all sides held men and women like themselves. The day came when a drifting raft of palm-logs or a dead body, brought them the knowledge they desired; but short of Sir William Thomson's life-bearing meteorite, what is to enlighten us? Still the microscope reveals a universe of existence beneath the range of the unaided eye. Myriads of perfect organisms swarm in every corner and crevice of nature; a rose-leaf is a menagerie of odd creatures; a drop of water a museum of aquatic monsters; parasites are peopled with parasites, and the very floating motes of the sun-beam carry millions of fruitful germs. Beneath us life is omnipresent—why should it not be so around, above, and beyond us? From the exquisitely-organised life of their own planet, and the perfect fitness of all its conditions, the earliest races of mankind believed, naturally enough, that this little earth was the centre of Creation, and the stars mere lamps hung up to beautify and illuminate its canopy. It is but as yesterday since this Ptolemaean theory died out; yet when Copernicus and his successors had proved that our earth is a poor little minor planet, circling round a very inferior sort of sun—and when it was learned that so vast is the scale of things that the light of the nearest stars-sun takes four years to reach mortal eyes, the question "Are there other inhabited worlds than ours" was put with greater insistence. The doctrine of economy seemed to render it so improbable that this insignificant spot alone should be the theatre of life and progress, and that all those splendid and mighty bodies circling round or shining afar should roll sterile of being. Science cannot reply. It has done a good deal; it can analyse the elements of distant bodies with the spectroscope, it can tell us which stars are approaching and which receding, it has mapped the moon and the nearest members of our system, and learned much about solar physics. But it cannot get free of human notions; it thinks and talks of life only as we know it here, and having calculated that even an uninflamable man would be flattened by his own weight on the sun, and that on Jupiter a ballet-girl could not dance a single step because of gravitation—to say nothing about difficulties of air and matter—it shakes its head over the business. Whewell thought that creatures might live in Venus "if they were of a pin's head size and had bodies of flint." The Neptunians, "with eyes like ours," could not so much as discern a single

one of the planets. In Jupiter, if there be Jovians, they must, like their habitation, be sloppy, feeble beings, made of "cinders and water." Thus great astronomers have mandered, forgetting that Nature equates her powers to her conditions, and that the lungs and heart and brains of terrestrials are as much the physical outcome of this globe as bodies of hydrogen might be of the solar corona, or eyes of ether and electrical breath of a starry habitant in Sirius or Aldebaran.

Discontented with the narrowness of science in this regard, certain bold spirits have actually discussed the possibility of solving the problem. The bodies to which they directed their attention were Mars and the Moon. All others are too hopelessly afar for even the wildest scheme of telegraphy, and Mars himself never comes nigher the Earth than forty millions of miles. The moon, however, swims in the sky only two hundred and forty thousand miles away—a perfectly dead and effete orb, the savants say, with no water, no air, and no likelihood of life, though a Chicago newspaper did once give an account of Lunar people seen about the "Sea of Serenity." If there be nobody of any kind in the Moon, these audacious theorists said, "well and good! but if she be peopled, somebody there must know something of geometry, which is a common basis of science." They proposed, therefore, to build upon Salisbury Plain, in mile-long lines of furze, or other heaped up fuel, the diagram of the forty-seventh proposition of "Euclid," and on a clear night to set fire to it simultaneously. A geometer in the Moon, they thought, would see and recognise the "doctrine of the hypotenuse" in fiery outline, since we ourselves can, with good glasses, discern an object as large as St. Paul's Cathedral on the lunar surface. These theorists hoped, therefore, that the mathematical signal might haply be beheld by an intelligent lunarian and answered in the same fashion with some familiar symbol or figure—after which, they argued, communication of some sort could soon be established. The wild experiment has not been tried, and perhaps at best geometrical study has never been much cultivated in that pale orb where water would boil at freezing point, and where the air, if it exists, is two hundred times rarer than our own, not to speak of the scientific belief that the moon burned herself out into ashes a thousand million years ago. Let us then turn to Mars, wherein Signor Schiaparelli has just discovered this network of tranches or "canals," which look as if enormous public works were being prosecuted. That planet, though so distant, is full of strongly marked features under the telescope. Five thousand miles in diameter, and therefore not so large as our earth, it is yet a respectable globe, which might, indeed, have giants for inhabitants, since its gravity is so small. Its year is nearly twice as long as ours; its summer probably cool and its winter warm, while even at forty million miles of distance we can note the red and green patches of color on the planet, which have been accurately mapped, and the white spots at each pole, which are considered to be Arctic and Antarctic icecaps. This red hue of Mars has puzzled everybody save the French savants, who make capital of anything. A Parisian astronomer put forward the theory that vegetation in this planet is crimson instead of green, and that is why we see Mars ruddy in his summer season and dull in his winter time. It would be interesting to know what magnificent planetary flower it is which, thus suddenly blossoming over thousands of square miles, sends the rosy glow so far into space. But Mars, if he has not these sublime "gardens of Gul in their bloom," possesses almost certainly atmosphere, waters and snow, with oceans, rivers, clouds, rain, and fogs, as well, apparently trade winds and oceanic currents. There is evidently going forward in that orb astrono-