

The Comet.

COMMENTS ON COMET BY CITIZENS.

The comet is a wonderful show, and it takes a power of faith to believe what the astronomers say about it. My folks wanted to see it, and so I got 'em all up in time yesterday morning, and they wrapped themselves up in shawls and blankets, and I took little Jessie in my arms and we paraded out beyond the grove, where there was a clear sight, perused it to our satisfaction. The little chaps amused us with their questions, for they haven't much idea of infinite distance, and we grown folks got bewildered in trying to take it all in. One hundred and twenty millions of miles away is a right good piece, and when a body is travelling 2,000,000 miles in a day it must make a powerful buzz in the firmament, and it is a wonder we don't here it like we hear these coal-burning locomotives, away off in the dead of night. That comet has some

NO BUSINESS ON HAND

and I would like to know what it is. I see that one learned man says they furnish fuel to the sun, and this one was badly needed right now, for the fires were getting low, and one can see the dark spots where the coal was burnt to cinder, and if more coloric didn't come soon from somewhere our people wouldn't have to go up to the Arctic regions to freeze to death. It is a grand idea to think of some Vulcan standing a way up in the regions of space chucking up the old sun's fires by throwing comets at him, but still I would like to know where the old fireman gets his comets, and where he keeps 'em hid out from mortal eyes. I could ask as many questions, I reckon, as the children asked me, and know as little about it afterwards. Jessie wanted to know if a hundred millions of miles was as far as across the ocean, and how many times further it was than from here to Winnipeg. She wanted to know how much faster it travelled than the cars, and its tail would make

A MIGHTY PRETTY BROOM FOR A GIANT

to sweep the sky with. Carl undertook to enlighten her, and told her that Atlanta was just nowhere to the comet—that the comet was further off than the sky, or the moon, or a rainbow, or a thousand pine trees put on top of one another, and it was going faster than that flying horse that papa told us about. The wise men tell us that it went within 400,000 miles of the sun, and is now getting away from it at the rate of 2,000,000 a day. That's business. That's furnishing fuel in a hurry, and getting away far more with proper alacrity, but it is a wonder to me it didn't get its tail scorched. I wish that all you city folks could see the comet, for it is a show that doesn't come along more than once or twice in a lifetime, and it never advertises its coming in the newspapers. City folks don't know exactly how to go about getting up at four o'clock in the morning, and if they did, they would find somebody's house or their shade trees in the way, and would have to walk out a mile or so to get a fair view of it. I suppose they could get to see it by sitting up all night, and getting on top of the house, but they won't do that for a free show. If old Vulcan had his curtain up, and a doorkeeper was to charge \$5 a night, he would make money, and more folks would turn out than now for nothing. The comet is a wonderful thing to think of; one man says that this whole universe is going to pieces, for it all depends on fire, and the fires are fading for want of fuel, and the sun is growing dim, and the world after world will drop into it until they have all dropped, and after that the sun would flicker out like a dying candle, and

WE WOULD ALL BE IN THE DARK.

if we hadn't been burnt up already before, and so it becomes us to be prepared for the worst, for the catastrophe will shortly happen, about four hundred quintillion years from this date, and no three days of waiver or protest Jesus! This shows that a man should always be fortified with comets. Keep matches on the mantle-piece, and your boots where you can find 'em, for no man knoweth when old Vulcan will wrap a comet's tail around our earth and sling us into the sun for fuel.—*Toronto Mail.*

ROCHESTER, N. Y., Oct. 11.—Professor Swift, of Warner Observatory, says the new comet discovered by Schmitt, at Athens, is unquestionably a fragment of the great comet broken off at its perihelion passage. This proves the great comet must have grazed the sun and passed through a terrible crisis. This is the second instance on record where a comet has been disrupted, the first one being Biella's of 1846.

New York Sun, 12th.—The great comet still shines brilliantly for more than an hour before sunrise, and shows to better advantage now than last week, when the bright moonlight dimmed it. Yesterday morning its tail, which was distinctly forked at the end, was fully eighteen degrees long and astonishingly bright. There is evidently some disturbance going on in the nucleus, as it has several times been seen separated into two or three parts, which afterward closed up again. It is not a new idea to astronomers that the nucleus of a comet may consist of many fragments held together by mutual attraction. The thought becomes almost startling, however, in view of the phenomena presented by the present comet. Think of these huge cometic masses rushing madly toward, whirling round and round, yet held together in the leash of gravitation, plunging through the fiery outer atmosphere of the sun, and then hurled forth again, clashing and crashing, with tremendous smoke and flame and fury, yet unable to burst the bonds that hold them! It is no wonder that the inhabitants of the sun's family of peaceful and steady-going worlds are amazed and terrified by the furious appearance of his queer visitors from the depths of space.

AS SEEN FROM PANAMA—A BRILLIANT SIGHT.

PANAMA, 17th.—Yesterday at 4 a. m. the tail of a great comet was observed over the summit of the Andes. Its great size and silvery brilliancy presented an imposing sight. The angle it formed with the horizon was more than four degrees, its azimuth, twenty five degrees in breadth, moveable with twenty two degrees, right ascension fifteen degrees, and declination northward thirteen degrees. Its longitude could not be measured as the sky became hazy just as the nucleus was observed. It is centering in the constellation Cancer, and very soon will be in that of Gemini. When it enters the constellation Laurus it will appear at midnight. It resembles the comet of 1811.

Professor Parkhurst in *New York Herald*, October 6.—In conversation with the Professor, a reporter inquired the dimensions of the comet.

"The tail," said he, "is at least fifteen degrees long, and would reach between the two most extreme stars of the handle of the Great Dipper—that is, about fifty million miles—more than half the distance from the earth to the sun. In this comet the tail points away from us. The reason that Donati's comet looked so large was that its tail pointed this way."

"Was it more brilliant when it was first discovered?"

"The head was as bright as Sirius when I saw it first, and I thought the tail would lengthen until it reached Alpherd. But it has

not come more than a million miles nearer to us than the sun. It came up from beyond the sun, you see, passed it, and then passed back again. It is fast receding, probably at a rate of two-and-a-half million miles a day. But this rate will gradually be lessened. At the present time it is about seventy million miles from the sun and one hundred and twenty million miles from us."

"Has it been very near the earth?"

"Oh, no. Donati's comet came three times as near us. But it is a remarkable thing that on the 18th, 19th and 20th of September I could see this comet at noonday with my telescope right through a considerable veil of mist, but now the telescope fails to bring it out in daylight, even while the sun is below the horizon."

"Will people who keep respectable hours be able to see the comet after awhile?"

"They will not be able to see it before midnight, that is certain. Every day after this it will be visible in its present place five minutes earlier. The sun is travelling eastward about one degree a day and the comet is moving westward a little less than a degree. You see they are moving in opposite directions, and while the comet rises earlier the sun rises later. So, although the brightness of our phenomenon is decreasing, yet when we see it against a perfectly black sky, as we soon shall it will be viewed to more advantage than at present. The moon is on the wane, too, and when her light is lessened the sky will be in splendid condition for a view of the comet."

"But this is the best time to see it, is it not?"

"By all means. I should advise every one who wishes to see this marvel of our planetary system to rise at 4 o'clock in the morning and watch in the southeastern sky for it. They will have a good hour's look at it before it pales."

No one knows much about it; there has not yet been time enough since the discovery to enable one to make trustworthy calculations. It is not the comet of 1843, 1880, or of any other year, so far as men know, and guesses are useless.

Speaking of the comet of 1843 Newcombe says: "Its orbit did not certainly deviate from a parabola. The most careful investigation of it—that of Professor Hubbard, of Washington—indicated a period of 530 years, but the velocity which would produce this period is so near the parabolic limit, that the difference does not exceed the uncertainty of the observations."

If then an astronomer should say that this is "the comet of 1843, which reappeared in 1880 and in 1882," it is lawful to suggest that he is mixing things too promiscuously. If the orbit of the comet of 1843 is a parabola, the body will never return to this system.

Donati's comet was first seen on the 2nd of June, 1858, and after it had been watched and "set up with," so to speak, by all the principal astronomers in the world for six months, Professor J. D. Runkle, of Boston, published the following as the results of the computations by the most eminent computers in this country and Europe.

PERIOD OF DONATI'S COMET.

Watson.....	2,415 years
Bruhns.....	2,102 years
Lowy.....	2,495 years
Graham.....	1,520 years
Brunnow.....	2,470 years
Newcomb.....	1,554 years

Twenty years afterward, Professor Newcomb gives 1,950 years as the result of G. W. Hill's careful research.

Such being the facts in regard to this celebrated comet. Sensational articles about the comet of 1882 are entirely out of place, and