

## THE GULF STREAM.

TO LEUT. MAURY, U. S. N.

DEAR SIR—A few evenings since I was engaged in conversation upon a subject in which I had previously devoted some considerable thought, and on which I had proposed to lecture, but other things having occupied my time I have not done so; but as you, as an authority, were appealed to during the conversation, pardon me for addressing you upon this subject. You have taken a deep interest in making soundings of the ocean and a general chart of the water is you may, therefore, be better able than any other man to say whether the theory entertained by me for the cause of the Gulf Stream is correct. If you think it worth your while to examine into that theory and understand what it is, you would oblige me. In order for you to do so, it is proposed you should take a map of the world, and examine the position of the rivers of this continent lying between the Alleghenies and Rocky Mountains, those of Mexico, and in our southern States that border on the Gulf of Mexico, those of Central America and the northern part of South America, and observe into what they flow, and then the narrow gorge or outlet between the coast of Florida and the island of Cuba. These innumerable and hundreds of thousands of miles of rivers, some of the largest capacity and greatest length of any on our globe, throw their accumulated waters into the Gulf of Mexico, and have to make their exit to the ocean, dammed up as they are from escaping in any other direction by the long reach of the Antilles, which by their own heads, or by their sundered rocks, afford a complete barrier to their passage in any other way than through this narrow gorge, and then, towards the question whether this great accumulation of waters in the Gulf of Mexico, subjected as they must be to the tropical heat of the sun through the Gulf, having to flow so great a distance, and presenting it to large bodies of water, might not explain the fact that when they arrive off the eastern coast of Florida they should have attained to a degree of heat of 76° (that being the heat of the water in the Gulf), and that they should rush through that gorge with the velocity they do, every particle of which is ever and continuously pushed on by the constant rush of these rivers. Then take into consideration that there is a tide setting into the Caribbean Sea, commencing at Cape St. Roque, on the north-east point of South America, which continues through that sea and through the Gulf of Mexico, and adds to the waters, after being subjected to the same tropical sun, through the vast extent of this sea and Gulf and along the coast of South America, to be added to those of the innumerable rivers that flow into the Gulf, and all to have their outlet through the narrow space between Florida and the island of Cuba. It has seemed to me that this is a proper solution of this great phenomenon, and the meeting of these heated waters with the saltier and colder waters of the ocean is the occasion of the phenomena that takes place at this outlet of them, walled up, as they are, between the coast on either side. In looking at the map, and considering attentively these facts, and your superior knowledge of the position of things there (for I have never been there to examine them), you may be able to confirm or disprove that such causes could produce such results.

Again, look at the map of the waters that run into the Mediterranean Sea, and what is the course they must take? We understand it has been ascertained that the water is, apparently, constantly flowing from the coast of the ocean, there is an under current that flows into the ocean, shooting, as it were, under it, producing, till that current was ascertained, the unaccountable phenomenon of toward flow of the ocean through the Straits of Gibraltar, which had the scientific to suppose there must have been sufficient evaporation going on by the Sun to carry off these waters, accumulating, as they apparently did, from so many sources. We understand there is a tide commencing at the Bay of Biscay, (supposed to be occasioned by the trade winds) running south on the coast of Africa, till it meets with a current running from the Cape of Good Hope, occasioned, as is supposed, by the monsoons; and perhaps, I may add, a current round Cape Horn, both of which are, perhaps, occasioned by the waters that flow into the Pacific on the western coast of South and North America, and the southern and eastern coast of Asia, which, joining with the current as it flows off the north-western coast of Africa, strikes the north-eastern coast of South America at Cape St. Roque; then you will perceive by the formation of that coast, it would lead this current into the Caribbean Sea, and meet the waters that flow into the Gulf of Mexico, now, keeping your eye on the course of the Gulf Stream, the question has arisen in my mind whether, after striking the coast of Europe, it does not continue down that coast till meeting with the waters that flow into the Bay of Biscay and the waters of the Mediterranean, as they arise from their submergence, and continue on in their course, making a number of thousands of miles, which have to be filled and emptied at every rise and fall of the tides, which, together with the waters which come from the other branches of the river, probably producing its rapid flow—so rapid that it never freezes over.

The question has arisen if so small a river and bay, containing fairly speaking, no principle such effects that its influence can be felt so far out at sea, and other rivers on the coast are felt in a similar manner, what may or what must be the effect of so large a number of rivers of such extreme length, many of these three or four thousand miles long, and bearing on their bosoms, as has been expressed, whole forests of trees, and acres of land sunk beneath their waves? and these continue ever flowing, and are, without cessation and without ceasing, pushing before them, for an eternity of ages, the waters that immediately proceed them.

Taking this view of the subject, the question arises, with these facts in your mind, explain the currents of the ocean? and the observations you have made in your valuable surveys confirm this theory, and enable our navigators better to understand the currents, southerly currents, and eddies which it is presumed they meet with in all parts of the waters.

G. W. F. MULLEN.  
Boston, Mass., August, 1858.

## THE COMET.

To the Editor of the Daily Colonist.  
Magazine Observatory, Toronto.  
8th Oct. 1858.

SIR—So much that is at least apparently contradictory has been written lately, in our public journals, relative to Donati's comet, and with that which may be admitted as true and instructive, there has been often so great an admixture of the false and palpably ridiculous, that he would do a good service who would come forward to unravel this network, and give out to the world what comet (if any) of past history this one can be identified with. I am not prepared to undertake this task, but it will be a step in the right direction if I remove one opinion and its grounds and orthodoxy, and it may not be altogether

useless if, in addition, I point out in brief and general terms the process by which these enquiries are made, and show how great are the difficulties with which astronomers have to contend in conducting them.

The propriety of calling this comet after Donati is founded on the principle of cometary nomenclature, that name is best which embodies fact, and does not imply a theory which may be afterwards overturned. Thus, as long as the identity of this comet with any formerly seen remains a matter of mere conjecture, it will continue to be called after Dr. Donati, who (during its present visit to the sun) first discovered it at Florence on the 29th of June, 1858.

It was then seen about 70 degrees east from the sun, and with a declination about 11 degrees further north, and was found to be moving westwards, or towards its perihelion. After passing that point it reappeared early in September.

On the morning of the 15th, some observations taken on our premises with an altazimuth instrument, which, though excellent for its own proper duty, is ill adapted for so delicate an operation, gave as the approximate position of the comet—

|                      |                                    |
|----------------------|------------------------------------|
| Right ascension..... | h. m.                              |
| .....                | 11 21 3                            |
| Declination.....     | 36 24 N.                           |
| .....                | about 4 degrees west from the sun. |

For several nights its motion, though towards the east, was more slow than that of the sun, and its declination changed very slowly. From the 27th its motion, both in right ascension eastwards and in declination northwards, have continued to increase in rapidity, as will be seen from the following approximate positions calculated from observations with the altazimuth instrument—

|                      |                     |
|----------------------|---------------------|
| Sep. 27, R. A. 12 41 | Declination 33 4 N. |
| 28, " 12 52          | " 32 9              |
| Oct. 1, " 13 23      | " 27 58             |
| 2, " 13 34           | " 26 12             |
| 3, " 14 10           | " 19 17             |
| 4, " 14 35           | " 13 17             |

Its daily motion is at present about 13m. in right ascension towards the east and in declination about 38 towards the south.

Now, as we know that, as the body recedes from its perihelion, its speed must really be diminishing, this apparent increase of velocity is owing to its nearer approach to the earth.

A little consideration will then make it evident that the motion of the comet is in the direction in which the hands of a watch go with its face to the sun, or, in other words, that the motion of the comet round the sun is retrograde.

When the comet was first seen by Donati it was by him supposed to be the expected comet of Charles V., whose arrival at its perihelion was predicted by Hind, on the 1st of August, 1858, within a limit of two days. The arrival of Donati's comet, so near the time predicted for Charles V.'s comet was certainly a presumption in favor of the two being identical, but unfortunately there is this fatal objection to the opinion that the two comets are moving in opposite directions; that of Donati being retrograde, while that of Charles V. was direct.

The identity of a comet with one seen at a former epoch is inferred from the general resemblance of what are termed the elements of the orbits. These elements are certain numbers which define the position, form and magnitude of the orbit and the epoch at which the body passes its perihelion, and also supply the means of determining the periodic time or the time that elapses between two consecutive perihelion passages. The elements of any comet that has formerly been seen ought then to inform us when it will arrive again, and to enable us to determine, with some degree of accuracy, whether it is the same or some other comet that has not been seen before.

This might seem an easy process, but it is in truth far from being so, especially in the case of comets of long period. One obvious cause is the inferiority of instrumental means in the earlier periods of astronomical history, which comets were before visible; and the loss of early records. Another, that comets of long period are more liable to be exposed to the disturbing action of the larger planets, and thus be drawn out of and caused to move in orbits different from those derived from observations made on them near their perihelion. The amount of these disturbances can be calculated, provided that the elements are accurately known; but when astronomers have to search back into remote history for the materials whence to calculate the elements, the requisite accuracy cannot be arrived at.

The elements either of a planet or a comet are not directly observed, but are calculated from at least three but usually from several observed geocentric positions of the body with the corresponding times. Some position of the body are better adapted than others for determining these elements correctly, and for a planet these can generally be employed; but as the visibility of a comet is usually of short duration, it is not generally possible to use any choice in the selection of the best positions, and hence another difficulty with which astronomers have to contend. Much more might be written on this subject, but I think I have said enough to show, in some measure, how great the difficulties are that attend the researches of astronomers on the question of new comets, and to show how difficult it is to the science of astronomy, that the possession of the facts from which any conclusions can be legitimately derived.

Before concluding, I take occasion to remind you that the calculated positions given above make no pretensions to strict accuracy. This establishment, not being an astronomical observatory, it is not furnished, strictly speaking, with any astronomical instruments, and the instrument employed, though particularly good for azimuths, is quite incapable of taking altitudes with tolerable exactitude.

I remain, Sir,  
Your obedient servant,  
G. T. KINGSTON.

M. LARZ, of France, in the course of his investigations on the teeth, has arrived at the following conclusions: First, that refined sugar, from either case or beetle, is injurious to healthy teeth, either by immediate contact with these organs, or by the gas developed, owing to its storage in the stomach; second, that if a tooth is macerated in a saturated solution of sugar, it is so much altered in the chemical composition that it becomes gelatinous, and its enamel opaque, spongy, and easily broken; third, this modification is due, not to free acid, but to a tendency of sugar to combine with the calcareous basis of the tooth.

THE PERISH POSTAGE.—A traveler, returning through the lake districts of England, some years ago, arrived at a small public house just as the postman stopped to deliver a letter. A young girl came out to receive it; she took it in her hand, turned it over and over, and asked the charge. It was a large sum—no less than a shilling. With a heavy heart she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired. The traveler pursued his journey, and as he plodded over the Cumberland Fells, he mused upon the badness of the system which drove people to such stratagems for means of corresponding, and defeated its own objects all the while. With a heavy heart, she observed that it came from her brother, but she was too poor to take it, and she returned it to the postman accordingly. The traveler was a man of kindness, as well as of observation; he offered to pay the postage himself, and in spite of her reluctance on the girl's part that he could well understand, he did pay it and gave her the letter. No sooner, however, was the postman's back turned, than she confessed that the proceeding had been concerted between herself and her brother; that the letter was empty; that certain trifles on the direction conveyed all that she wanted to know, and that as they could neither of them afford to pay postage, they had devised this method of franking the intelligence desired