

From the National Intelligencer.

THE SOLAR PHENOMENA.

We are obliged to a respectable friend in Alexandria for the following interesting observations upon the late extraordinary appearances connected with the Sun:

ALEXANDRIA BOARDING SCHOOL.
Six Month, 20th, 1831.

Friends Gales & Seaton: In compliance with the suggestion in your paper received to-day, I send you the following views respecting the very unusual, if not unexampled appearance of the sun, observed a few days since.

To understand the phenomena alluded to, it will be necessary to make a few preliminary observations. During the great total eclipse of the sun that had recently taken place, the moon had just passed its perigee, or that point in its orbit nearest the earth, and consequently the combined action of the sun and moon upon the atmosphere produced a great tide in the equatorial regions, and diminished the pressure of the air upon the whole of the surface of the earth.* This diminution of pressure upon the surface of the water would occasion a great increase of evaporation, particularly when united with the high temperature that accompanied it. For it is an established fact, that the amount of evaporation from an uninsulated surface of water depends upon the elevation of temperature and diminution of pressure. A vast quantity of vapor thus raised was very observable on the evening of the 12th instant, at a considerable elevation, in the western part of the heavens, and continued to reflect a very red light for a long time after the sun had set.

The appearance of the heavens on the morning of the 13th I did not observe; but about mid-day, the sun shining through this body of vapor had a silvery appearance similar to that which it wears when shining through a vanishing fog, and I observed it to give an unusually ghastly appearance to the countenances of persons. Between 3 and 4 o'clock, the position of the sun with respect to this body of vapor becoming changed, it assumed a greenish blue appearance, precisely similar to that produced by the following experiments, and which in my opinion was dependent upon the same cause. Let a screen upon which the spectrum produced by the separation of the solar beam into its primitive colors by a glass prism is thrown, be perforated so as to let all except the red ray fall upon a double convex lens, and be converged to a focus, the result will be a representation of the sun of a greenish blue color, exactly such as it was observed to have at the time alluded to. The color is that resulting from the combination of all the primitive colors except the red, and is denominated in optics the opposite color.

The same experiment may be performed more familiarly thus: Place a red wafer upon a white wall, and look at it intently with one eye for some time; then let the eye rest, without much effort at seeing, upon the wall, and a spot, the size of the wafer, of a greenish blue color, will be perceived. The explanation is, that the retina, through the action upon it by the red light from the wafer, becomes insensible to the red ray in that part upon which the image of the wafer rested, and hence the color produced upon that part of the retina, will be the one resulting from the combination of the other six.

The greenish blue color of the sun, then, I think, depended upon the red rays being reflected by the intervening body of vapor, while the other six passed to the eye, and produced the observed appearance. This opinion was strengthened by one or two facts observed at the time. I passed the sun's rays through a prism, and while the yellow, green, blue, indigo, and violet colors appeared with their proportionate brightness, the orange was considerably less distinct, and the red much less than the orange.

Another corroborative fact was, that, as the sun descended below the body of vapor, which was about fifteen or twenty minutes before its setting, the vapor reflected an intensely red light—the light that passed through it was therefore separate from the red, and would have produced the opposite, or greenish blue appearance.

The spot that was observed, is by no means an unusual thing upon the sun's disc. It was visible to the unprotected eye, merely in consequence of the diminished brightness of the sun. By aid of a telescope, a considerable number of spots were visible. In the summer of 1816, a spot was visible to the naked eye for eight or ten days in succession.

If the above remarks are any way satisfactory to you, it will be a gratification to your sincere friend,
BENJAMIN HALLOWELL.

* It is evident, that as the air is partially supported by the combined attraction of the sun and moon, its pressure upon the earth must be diminished. The greatest effect would not be at the immediate time of conjunction, but some days after.

From the Carolina Observer.

Internal Improvement.—We think there are circumstances of recent occurrence in our State, which indicate a deeper interest in the doings of the Legislature than the people have been accustomed to feel for them; and when they are once fully aroused by the contemplation of its past neglect of the great cause of Internal Improvements, we cannot doubt that they will provide a

remedy. The great difficulty in this State has heretofore been, to get the people to act, to procure a general expression of enlightened public opinion. The members of the Legislature are generally afraid to risk their popularity upon measures of doubtful policy; and those few who have projected plans of improvement, have not been sufficiently sustained by their fellow members. The able report of Mr. Fisher, a few years ago—the resolutions, year after year, by different members, in favor of Rail-Roads from Fayetteville to the West—and even the proposal for an appropriation of a few thousand dollars to make an experimental Rail-Road in this town—have all alike fallen upon deaf ears, simply because the people have been inert, tamely submitting to whatever of good or evil their Legislators may do for them. We will not believe that such indifference can much longer prevail; if there were no other cause for hope, the all-engrossing question to be agitated at the ensuing session, would create an interest which will not again sleep, as we hope and believe. What, then, will be the result of this awakened feeling? Can there be a subject of more lasting concern, than the providing of good roads from the rich and fertile regions of Western North-Carolina, to the Market Towns on the sea board?—Until we make them, our strength and wealth are still doomed to be frittered away,—the one by emigration, and the other by expenses of transportation.

It is the interest of the Western and Cape Fear sections of the State, at least, and it ought to be, and we doubt not will sooner or later be, the acknowledged interest of the whole State, as it is the dictate of experience and common sense, to provide the very best means for the farmer to convey his produce to a market, within the State. To argue the point is needless, whilst there exist so many striking arguments in the stupendous works of our Sister States, executed and in progress of execution. Public opinion has too conclusively settled down in favor of Rail-Roads upon all great thoroughfares, to require any reasoning upon the subject. It is the spirit of the age; and we trust that North-Carolina will not much longer delay to fall in with it, but will undertake a Rail-Road from Fayetteville to the West. We shall be forced into it in self defence; otherwise, we shall be undersold in every market.—The planter in Western South-Carolina, and he in Western Virginia, who can convey every article of surplus produce to market, for one per cent. of its value, will possess so manifest an advantage over him of Western North-Carolina, who can get only a few leading articles to market, and they at a cost of fifty per cent. that we shall be sooner or later forced into measures of self defence. Let us begin in time, then. The means are not wanting. The credit of the State is ample for the procurement of any required sum. And under present circumstances, whilst there is so much fear of the failure of private enterprises of any kind, and so little available capital to invest in them, we hold it to be a paramount duty of the Legislature to set the example; to strain its energies and its credit to the extreme length rather than leave us longer in a condition merely of existence, without the capacity for material improvement. The next Legislature will be more than ordinarily intelligent; and we look to it, if its time is not too much occupied with the subject of Convention, for a movement upon this important subject. We would appeal to it as the last hope of the State; we would urge upon it every consideration of individual and of public wealth and power; every feeling of State pride. We would point its members to the every-day exhibition of their sons deserting the land of their birth, the domestic fire side, the graves of their ancestors, in search of a land where toil meets with its appropriate reward, and where they can see their children grow up with an assurance of something better than a bare existence.

The Mysterious Knocking.—Our readers will remember an account, lately published, of a mysterious knocking heard on the head-board of the bed and on the floor near the bed of a girl troubled with hysterical fits, in Daniels-street, in this city. Shortly after the former account was published, the girl was moved to the country, and for a time the knockings left her. But they were resumed while she was in the country; and on her subsequent removal back to this city, they again returned. She was placed on a hammock swung from the ceiling, and to it there was no head-board; but the knockings were heard on the floor beneath the hammock, and they have also been heard on the door near where the hammock was placed. She has likewise been laid on a bedstead and on a cot, and the knockings have followed her. Public interest and curiosity have once more been awakened; superstition is again busy, and the friends of the girl are daily pestered with accounts of remedies to exorcise the evil spirit, which it is said possesses her, or to destroy the power of the witch who has control over her. It is hoped that the medical men may interest themselves in the matter, and, if possible, ascertain the cause of these knockings. By so doing, they might relieve the miseries of the girl, and remove the foolish fantasies of those who believe in supernatural agencies, and pay reverence to imaginary beings.—Albany D. Adr.

Foreign Intelligence.

By the ship Mary Howland, Capt. Howland, we have received Liverpool dates to July 13th inclusive.

They announce the death of the Grand Duke Constantine, brother of the Emperor of Russia, and the immediate author of the oppressions which led to the revolution in Poland. It is intimated, we know not how correctly, that he died by his own hand.

Mr. Stanly has withdrawn the clause in his Irish bill for punishing with transportation any person found in the possession of unregistered arms.

Ministers have announced their intention of going through with the English reform bill previously to the discussion of the Irish and Scotch bills.

It is rumored, that the 23d of September is fixed for the coronation of their Majesties.

BELGIUM.

Prince LEOPOLD is now king of the Belgians. After a day's discussion, a division took place, when the members for the Prince were

Against him	126
Majority	76

A deputation, composed of M. Labeau, Minister of Foreign Affairs, Count F. de Meronde, Baron Joseph D'Houvoorst and Woelmar, and Mr. Hope, left Brussels on Sunday night, to wait on the new Sovereign of Belgium, KING LEOPOLD 1st.

POLAND.

The Warsaw Journals, which reach to the 27th June, contain a report from the General-in-Chief, dated Warsaw, June 24, relative to the operations of the army against the corps of Rudiger in the governments of Podlachia and Jiblon. On the 15th, the Polish head-quarters were at Siemnica, where the General-in-Chief removed to second the operations of Generals Sankowski and Rybinski, and to cover Warsaw. On the 18th, Prybucki took Zbuczyn and Siedlec, where he found large magazines. Jankowski, with a division of Infantry, some cavalry under General Tarno and General Romanno, were ordered to Kozk, in the government of Lublin, and then, with this improved force, to attack and defeat General Rudiger. Jankowski took Lukow on the 28th, and when he arrived at Gulow, near Adamow, he heard that the enemy had crossed over at Lysolyki, to the right bank of the Wieptz. Fearing that he might escape, he directed his whole corps into small detachments, and sent General Tarno to Lysolyki, near Budziska. General Tarno, who had only 3000 men, met with the enemy about 3 o'clock in the morning of the 19th, but no assistance came; the enemy was alone 10,000 strong. The action continued till 9 A. M. and both parties kept their positions.

General Tarno, on receiving positive orders, retreated to Czarna. His loss was 270 killed and wounded; besides this, detachments of the enemy got between the scattered corps of General Jankowski, and took two of his aids-de-camps who were the bearers of his orders, and the quarter-master, Maj. Buliyon, prisoners. On the same day, after the action fought by Gen. Tarno, all Jankowski's force was assembled at Gulsowska Wola; and Rudiger assembled his at Pivloczna; after which the former began his retreat to Warsaw, and the latter also retreated. Generals Jankowski and Bakowski are to be tried by a court martial for not having supported Gen. Tarno. The latter was the nearest to Tarno, and yet did not go to help him, though he heard the cannonade. The Warsaw State Gazette, however, says that Chrzanowski took the town of Lublin on the 20th, and joined Romanno on the 23d; and, that in the battle near Lublin, between Chrzanowski and Rudiger, the latter is said to have lost 6000 men, taken prisoners, and 5 pieces of cannon.

The accounts from Lithuania are generally unfavorable. It appears, that the cholera is becoming less malignant in its character at Dantzic and Riga.

Warsaw, June 29.—The Russians, we said yesterday to be within 12 miles (English) of Warsaw. The command has devolved upon Gen. Paskewitch, who is by birth a Pole.

NEWS FROM POLAND.—EXTRACTS FROM THE GERMAN PAPERS.

Warsaw, June 28.—Our government has just issued a proclamation to the Polish nation, with the view of convincing it of the necessity of participating in the loan just opened.

A report is in circulation that the Russians have quitted Plosk, and are retiring into Lithuania; the Poles have received orders to pursue them beyond the Bug.

The last accounts from Poland, are dated Warsaw, June 30, and are almost entirely confined to the details of an extensive and formidable conspiracy against the National Government, just discovered, involving several persons in the army, and some of the principle branches of the Administration. The object of this conspiracy appears to have been of an anti-revolutionary nature, and in favor of the enemy.

In consequence of those circumstances three different proclamations have been issued at the same time by the President of the Government, by Prince Czartoryski, by the commander-in-chief, and by the Municipal Council. They agree in attributing the conspiracy to the perfidy of the Russians, and to treason on the part of several General and inferior officers. But altho'

these proclamations were addressed to the people of Warsaw, public tranquility has been seriously interrupted in that quarter, and an extensive insurrection broke out there on the 29th ult. upon the arrest of some officers accused of treason, particularly General Hurlig, accused of keeping up a correspondence with the Russian ex-Colonel Breudel, treating with respect to the deliverance of and arming the 12,000 Russian prisoners, marching them to Warsaw, and hoisting the counter-revolutionary flag in that capital.

The people themselves were for taking prompt vengeance against the traitor, and demanded to have him instantly hung in front of his house. All the efforts of the different authorities to quell this disturbance were some time ineffectual; and even the citizen guard was unable to bring the people back to order; and it was only upon the request of the venerable President of the Government and the formal assurance that justice should be done—that the people at last retired amidst the cries of "The President forever."

St. Petersburg, 25th June.—By an imperial ukase, addressed to the Senate on the 4th, (16th) June, a general amnesty is declared in favor of all those who have taken part in the rebellion, and particularly for the nobility, commanders of troops, members of the priesthood, &c., on condition that they express their contrition, and offer by their future conduct a satisfactory guarantee for the sincerity of their opinion.—Severe punishments are decreed against those who persist in their disobedience, or who again return to insubordination.

From the Washington Globe, Aug. 24.

We learn from the Mississippi, that on the 31st of July, two or three hours before day, a party of from 50 to 100 Sacs and Fox Indians, surprised a Menominee camp, 3 or 400 hundred yards above old Fort Crawford, on the east side of the Mississippi, and killed twenty-five of the latter, and wounded many, who may probably recover. There were about 30 or 40 Menominees, men, women, and children in the camp, most of whom were drunk, and the women had concealed their guns and knives to prevent their hurting each other. The Sacs and Foxes, though greatly superior in numbers and attacking by surprise a drunken and unarmed encampment, lost several men, who were seen to fall in the onset, and retreated in less than ten minutes with only a few scalps, pursued by only 4 or 5 Menominees, who fired upon them until they were half a mile below the village.

The party killed, consisted of one war chief, three head men, four warriors, six women and eleven children.

This massacre of the Menominees is a most audacious aggression, not only against the unfortunate sufferers, but against the authority of the United States. The Menominees were on a visit to our post at Prairie du Chien,—were sleeping under the flag of the United States, and almost under the guns of the fort. The assaulting party crossed from the west bank of the Mississippi and made their attack in defiance of the power which has hitherto, in a great degree, been enabled to hold in check the fierce tribes even when at a distance from the military posts. The violence recently committed within the very precincts of the national authority, will require the interposition of the arm of the Government, that an example may be made by bringing the murderers to justice.

NEW-YORK, AUG. 25.

Constitutionality of the Tariff.—We are indebted to Captain Halsey, of the ship William Drayton, for the Charleston Mercury, of the 20th inst. It contains a statement of facts in relation to the Custom House Bond, at Charleston, the payment of which has been refused in order to obtain a judicial decision on the question of the constitutionality of the Tariff. It appears that the bond was given by Isaac E. Holmes and Alexander Mazyck, for duties on goods imported by them.

Mr. Holmes and Mr. Mazyck imported through the agency of one of our most respectable mercantile houses, a bale of Blue Plains, the subjoined account of which, taken from the invoice at the Custom House, and from the account sales rendered by the mercantile house through which the Goods were imported and sold, will show some important facts. It will appear that the duty of these Plains is prohibitory, and consequently that no revenue can be raised upon their import, the loss being such that they cannot be imported. It will also be seen that, with a moderate duty of 15 per cent., they would have yielded a clear profit sufficient to induce Merchants to import them.

For these duties three bonds were given; one of which being due is in suit.

As the case progresses the public will be further informed of whatever is deemed worthy of note. It is probable the case will be tried in September, as the writs are already issued.

A Free man of color, named Cozzens, was stabbed in Lower Fayetteville on Sunday, by another named Mitchell. The latter is from Raleigh, and has been but a short time in this place. He is now in jail, to await the issue of the wound, which will probably prove fatal.

[Carolina Observer.]

Improvement.—The number of houses built, removed, and now building, is as great as could have been anticipated by the most sanguine. Until within a few days, however, they were small, and built without much regard to durability or elegance. Whilst it is to be regretted that any such occupy conspicuous places on our principal streets, it could hardly be avoided under the circumstances. So general was the destruction, that it was necessary to adopt the most expeditious modes of securing places for business. But we begin to see evidences of a more liberal scale of building. The frames of several large stores have been raised, and the foundations of several two story brick buildings laid, and preparations making for the commencement of a number of others. We presume that not less than two or three hundred workmen have been added to our population, all of whom find employment at fair wages. There is an appearance of active business, greater probably than over was witnessed in this place in the summer season. [Fayetteville Observer.]

Manufactures.—A pound of crude iron costs in this country four cents; it is converted into steel, which is made into hair-springs for watches—every one of which sells for fifty cents, weighing only one-tenth of a grain. There are 5760 grains in a pound; of course one pound will make 57,600 hair-springs, which at 50 cents

is	\$28,800
Allow half for waste	14,400
	\$14,400

Now why is it that this increased value is given to the pound of iron? The answer is at hand: because it requires so much labor to produce hair-springs. And as the laborer consumes so large a portion of our agricultural productions, it follows; that the working up of 100 pounds of iron into hair-springs, would produce a market for nearly one million four hundred and forty thousand dollars of the labor of the agriculturalist. Of course, if manufactured abroad and brought in here, the raw material being of scarcely any value, every hair-spring of a watch is some forty or forty-five cents worth of agricultural productions imported to compete with our farmers.

Let any one inquire at a watch-maker's shop, and he will find this correct: And it is in this way, in a greater or less degree, that manufacturers benefit every member of society.—What a quantity of hats, shoes, clothes, &c. must be wanted in the manufacture of 100 pounds of iron into hair-springs! N. E. Journal.

Negro Murders in Virginia.

From the Raleigh Register.

INSURRECTION AND MURDER.—The disagreeable rumors which were in circulation in this city, at the date of our last publication, in relation to an Insurrection of the Slaves in Southampton county, Va. and a brief notice of which we inserted in a Postscript, turns out to be but too well founded! Though in its actual limits confined almost to a single point, yet from a concurrence of circumstances peculiarly affecting, it swells to an affair of national importance and will excite an interest as wide as the reign of sensibility itself. Could it be adequately delineated, it would subdue the savage bosom, though schooled in the practice of human torture. Like the head of Medusa, it can scarcely be looked on without converting the spectator into marble. We beg pardon, however, for resorting to fable—the dismal reality is alone sufficient—far beyond the powers of fiction.

From the multiplicity of reports to which this soul harrowing occurrence has given birth, we have endeavored to cull such facts as we believe to be substantiated. These we will succinctly present to our readers, without however vouching for their precise accuracy, though we have every reason to suppose them correct. They may serve to allay the anxiety of the public, until something official appears.

On Sunday, the 21st ultimo, there was a negro preaching in the neighborhood of the Cross Keys, in Southampton county, about ten miles from the Court House, at which a black preacher (a slave) named Nat Turner, officiated. What the character of his discourse was, is not stated, but is a fair subject of inference from the fact that the conspiracy broke out the same evening in that neighborhood, and was headed by the preacher himself, in conjunction with a free man of color, called Will Artist. His harangue most probably was the immediate cause of the disturbance, for it seems from all the accounts that the number of insurgents was few and that there existed nothing like a concerted plan, except in the narrow circle where it began. Perhaps by animating and encouraging the timid with hopes of success, removing the scruples of the religious by grossly prostituting the sacred oracles, and inflaming and confirming the resolute, by all the savage fascinations of blood and booty, this mis-called preacher so worked upon the feelings of his auditors that they immediately resolved upon their bloody course. Be this however, as it may, it is certain that on that evening about fifty negroes, headed by the two persons before named, rose in open rebellion and commenced an indiscriminate slaughter of the whites, sparing in their blood thirsty infatuation, neither age, sex, or condition. During that night and the following day, they succeeded in killing more than SIXTY WHITES.—