XXXVIIITH CONGRESS.—FIRST SESSION.

CLOSE OF YESTERDAY'S PROCEEDINGS.

SENATE.

Mr. Sherman called up the following resolution: That a quorum of the Senate hereafter consist of a majority of the Senators present duly qualified.

Mr. Sherman said the House had decided that a majority of those chosen constituted a quorum, and we should pass a similar rule. It was never intended that this Government should be broken up, either by open secession or for want of a quorum. We had yesterday an example of the evil effect of the present rule, when at five o'clock, just as an important bill was about to pass, the Senate found itself without a quorum.

Mr. Foster opposed the resolution, as there would be mere difficulty in finding a quorum then than now. The more the responsibility was divided the less it was felt.

Mr. Davis considered this the most important subject ever presented to the Senate, and he hoped, in order to allow it to be fully discussed, that it would be made the special order for to-morrow at 12.15.

Mr. Anthony introduced a bill to expedite and regulate the printing of public documents, which was referred to the Committee on Printing. It requires the accompanying documents of Departments to go to the Joint Committee on Printing to be edited, and portions selected desirable for popular distribution, and issued with reports from the President's Message in one volume. It also provides for the sale of extra documents at cost price.

The joint resolution to pay the State of Wisconsin five per cent. of the land sales within her borders came up.

Mr. Fessenden addressed the Senate in opposition thereto until the close of the morning hour.

The Senate then resumed the consideration of the bill appropriating twenty-five million dollars for the pay of one hundred day volunteers.

Mr. Hale, in deference to the feelings of his friends, the Chairmen of the Committees of Finance and of Military Affairs, who, with him, seemed to consider the measure unwise, yet necessary in the present emergency, would waive his objections, and, perhaps, vote for the bill.

The bill was then passed.

YEAS—Messrs. Anthony, Clark, Collamer, Conness, Doolittle, Fessenden, Foot, Foster, Grimes, Hale, Harlan, Howard, Howe, Lane (Ind.), Lane (Kansas), Morgan, Morrill, Ra usey, Sherman, Sumner, Van Winkle, Wiley, Wilson—23.

NAYS—Messrs. Buckalew, Carlile, Chandler, Davis, Harding, Henderson, Johnson, Nesmith, Pomeroy, Powell, Riddle, Sprague, Wade, Wilkinson—14

Mr. Wilson called up the report of the Committee of Conference on the bill to establish a bureau of military justice, and moved its adoption, proposing, as it does, that the Senate recede from its amendment limiting the pay of Judge Advocate General to $4,000, with the rank of Brigadier-General, and the pay of two Assistant Judge Advocates to $3,000 per annum, with the rank of Colonel. After some debate the question was taken on the motion to agree—yeas 18, nays 16; within two of a quorum.

After some delay in fruitless efforts to get a quorum, Mr. Grimes moved to adjourn, which was rejected—yeas 10, nays 23.

Mr Doolittle moved that the Sergeant-at-Arms be directed to request the attendance of Senators.

Mr. Collamer objected. It had never been the custom that there was no use to send out and bring in absent Senators while those here were in the meantime leaving.

Some Senators suggested that the doors be locked.

Mr. Sherman, at quarter past two o'clock moved to adjourn, which was carried—yeas 17, nays 15.

HOUSE OF REPRESENTATIVES.

Mr. Stevens (Pa.) reported from the Committee on Ways and Means the Senate amendments to the Navy Appropriation bill, and the House concurred in those appropriating seven millions two hundred thousand for the completion of sixteen screw steam sloops, four millions for the purchase and repair of vessels for the Western waters, and three millions for the purchase and charter of vessels for blockading purposes.

The Senate struck out the appropriation of a hundred and thirty-five thousand dollars for the purchase of the land adjoining the Charlestown navy yard, and on this amendment the Committee on Ways and Means recommended a non-concurrence.

Mr. Holman (Ind.) moved the reduction of the appropriation to sixty thousand dollars, showing that this was the value of the property last autumn.

Mr. Stevens explained the circumstances under which this subject came before the Committee on Ways and Means. The appropriation was recommended by all the commandants who had been at the yard; by Admiral Smith, Chief of the Bureau of Yards and Docks, and by Secretary Welles, who all consider the purchase necessary for the government uses.

Mr. Rice (Mass.) showed that the enlargement of the Charlestown navy yard had become necessary by the large increase of the navy.

The debate was continued—those who opposed the appropriation regarding it as a speculation.

The House concurred in the Senate's amendment—yeas 56, nays 38; and also concurred in the Senate amendment, providing that no money appropriated for the Naval Academy shall be applied for the support of any midshipman who shall not thereafter be appointed in strict conformity with the law.

The House considered Senate amendment, providing that the Naval Academy shall be returned and re-established at Annapolis before the commencement of the next academic year.

Mr. Dixon (R. I.) said that on the breaking out of the rebellion the Academy was removed to Newport by the Secretary of the Navy. The same authority which removed it can restore it. The academic year will commence September, 1865, and if occasion should occur for its removal before that time, it would, doubtless, be done Besides, the Naval Academy properly at Annapolis was occupied by the War Department, which had declined to surrender it.

Mr. Stevens (Pa.) said that Newport is a large and fashionable place; but, with all its vices, is no fit place for a young man. It was always better to have seminaries of learning in small villages, where there are few temptations to vice. Annapolis is a small village, and just about the right size. By returning to Annapolis the government will save seventy-five or a hundred thousand dollars.

The Senate amendment was concurred in.

The House resumed the consideration of the bill guaranteeing a republican government to States subverted or overthrown by the rebellion.

Mr. Perham (Me.) prefaced his remarks by saying that all our efforts should be directed to the suppression of the rebellion. He repelled the slander that this is exclusively an abolition war, and that it was a hellish crusade. Instead of the party in power being responsible for the war, it was that party which had control of the Government for sixty years. The Democratic party had clothed itself with everlasting disgrace by concurring with President Buchanan's declaration, and acting upon it, that no power to coerce States has been delegated to Congress or to any department of the Federal Government.

There never was a more disgraceful record than that made by the leaders of the Democratic party during the last four years. The rebellion was inaugurated under a Democratic Administration, with its patronage and consent; stimulated and encouraged by the promise of the aid of Northern Democrats, and now kept alive in the hope that the same party will come to its assistance. The course of Democrats here was doing more for the rebellion than our defeats on the battle-field. While they held President Lincoln to a strict account, and charged him with violations of the Constitution; they have no complaints to utter against the rebels who set the Constitution at defiance. They want to render him powerless to punish traitors. In conclusion, Mr. Perham said slavery must cease with the last struggles of the rebellion.

Mr. Kernan (N. Y.) examined the provisions of the bill under consideration, and opposed it because, according to his judgment, it was in violation and subversive of the great fundamental principles on which the General and State Governments stand. The people could, according to the bill, enjoy civil and domestic institutions only on the three conditions named, thus trampling under foot all the powers of the States. The Federal Government has no right to interfere with the people in changing their constitution and making their laws. We can do nothing more than to guarantee a republican Government in accordance with the Constitution. He believed the effect of the bill would be to crush out the loyal men in those States, and stimulate them to resistance. It was an inversion of the powers of the people of a State which are inherent, and of which they cannot lawfully be deprived.

Gentlemen should not, while seeking to preserve the government, be influenced by feeling and prejudices. The question is not how much the South have sinned but what is wise and best for a happy and peaceful Union for both North and South, for history tells us if we disregard the Constitution, which is the great bond which holds the Union together, we will not only trample upon the rights of States, but destroy our own liberties. We will not save and restore the people of the land under the government by trampling on the guarantees of Constitution. Drive out the usurpers, and the people will take care of their own States.

The name of Samuel J. Randall, of Pennsylvania, was erroneously printed in favor of, instead of against, the bill equalizing the pay of colored troops and placing them on the same footing with white soldiers.

Leonard Myers (Pa.) asked and obtained leave to record his vote in favor of the same measure.

The House then took a recess till seven P. M.

Evening Session.—The bill guaranteeing republican governments to States subverted by the rebellion being under consideration, Messrs. Gooch (Mass.), Perry (N. J.), and others made speeches.

Fernando Wood (N. Y.) said he had carefully examined this bill and the speech of the chairman of the select committee, Mr. Davis (Md.), to ascertain on what fact he predicated the assertion that State Governments have been overthrown. The gentleman declared that there can be no republican State Government which does not recognize Congress and the President, and that the Governments here represented are the only governments existing. This was a vast assumption, and the extreme of folly. The Confederate Constitution, with all its elements of republicanism, is an improvement on our own, because it more clearly defines the powers of the States. The people of the Southern States to day enjoy a higher degree of liberty than we have had for the last three years. North Carolina openly opposes the Confederate Executive. What Northern State would dare to follow the example in respect to our own? Doubtless, despotism exists at the South, as military authority is always repugnant to liberty. To impose on any people a government against their will would be the worst form of government. He controverted the doctrine enunciated by the gentleman from Maryland, extending whatever may be the condition of the country, the States remain. He proceeded to notice Mr. Schenck's former remarks, who had charged that he had recommended the secession of New York. To this he replied that he did, on the first day of January, 1861, in advance of any secession by any State, in a special message to the Common Council, recommend that, if the repeated wrongs and outrages of the State Legislature should be repeated on the city, that it should become a free city; not, however, independent of the Federal Government. Another charge was, that he had made a speech at the great Union meeting, in April, 1861, and there declared himself to be a War Democrat, and the gentleman added he spoke by his side on the platform, and said, you may call it an honor, or a dishonor, if you will. His participation, however, was confined to an advocacy of money and troops to defend the capital. He went no further than this. Of course, he was for maintaining the Union in fact. He was so now, whilst the member from Ohio and his colaborers in the cause of forcible negro emancipation were avowed disunionists. If, said Mr. Wood, that gentleman spoke by my side, he spoke at the side of those who never fled ignoriously from the field of battle, or ingloriously from the enemy. He stood by a man who never vilified and traduced the sainted Jackson and eulogized the Jeffreys who fined Jackson for interposing between patriots and traitors. He stood by a man who never, clothed with a little brief military authority, performed the acts of a despot and interfered with the rights of two sovereign States. As to General Schenck's resignation of his commission he (Mr. Wood) pledged himself that if he could not prove, were an opportunity afforded, that there was a verbal understanding with the Secretary of War that he (Schenck) could resume his commission at pleasure, he (Mr. Wood) would resign his seat.

Mr. Wood then replied to the other charges of Mr. Schenck, and especially to that implicating him with the New York riots. The party in power, he said, had raised armies under false pretences, and had committed the greatest outrages against the Union and constitutional liberty ever perpetrated by despotism.

Mr. Kelly (Pa.), after making an allusion to Mr. Wood, said that Robert Toombs, in telegraphing to the then Mayor of New York, spoke of arms, and not merchandise. This is a record which stands against the gentleman's assertion. The gentleman left New York with riot and sedition boiling, that the fiends might do their work.

He then advocated the bill, although it was not exactly what he desired. They to-night the South have not only abolished State Governments, but have established others, and we know the seat of their confederacy is at Richmond. As to the territory, it belongs to the Union for all time, and if he could he would drive the traitors to the Gulf beyond. He would do this with joy. The Supreme Court of the United States has decided that these revolted States had the same rights only as alien enemies—enemies invading the land—and that they are not only traitors but public enemies. These States are overthrown, and it is the duty of Congress to provide governments for them when conquest is made, and it is our duty to make conquest by all means known to modern warfare, and within the limits of the nation.

The House, at 10.35 P. M., adjourned.

THE LATE EXPLOSION AT CORNELIUS & BAKER'S FACTORY—CONTINUATION OF THE CORONER'S INQUEST.

Coroner Taylor resumed the investigation of the late explosion at Cornelius & Baker's factory yesterday afternoon. The following is the substance of the evidence elicited:

Mr. Donaldson, the engineer, was recalled. The jury exhibited a drawing showing the parts of the boiler. The witness went into a lengthy explanation as to the opposites in no two boilers; he never attempted to fill both boilers at once, as one would fill before the other. A great variety of questions were asked in order to test his capacity as an engineer, and to ascertain, if possible, which boiler exploded first. He had observed scales in the bottom of one of the boilers which he had endeavored to scrape off.

Wm. Miller, sworn—Was employed as watchman at Cornelius & Baker's factory; Donaldson came there on the morning of the explosion, about five minutes after six o'clock; did not notice that Donaldson was intoxicated; knew nothing about the fires on morning of explosion; never knew the engineer to be intoxicated except on one occasion about two years ago; this was the only time; noticed nothing peculiar about him on the morning of explosion; witness thought he would have noticed it had the engineer been intoxicated.

Jno. Bress was at the factory on Sunday, the morning before the explosion; am in the habit of going there to see that matters are all right; Donaldson was perfectly sober at that time; never saw him intoxicated.

Geo. W. Allen, sworn—Was at the factory on the morning of explosion; saw Donaldson and he was perfectly sober; as far as witness knew he was attentive to his business.

Wm. Livingston, sworn: Am foreman in the soldering room; noticed nothing unusual about the engineer.

James Grant, book-keeper at the establishment was examined in regard to the engineer. Always found him at his post and attentive.

Samuel Loper, sworn—Donaldson has been employed in the factory seven years, during which time he has only lost four hours; the pressure gauge in the office was examined particularly each day.

James Buckley was examined as to the ability of Donaldson as an engineer—Am satisfied he was a temperate and sober man.

Joseph Pollock, engineer, testified in regard to Donaldson's ability.

Algernon S. Roberts, sworn—Have examined parts of the exploded boiler; the whole surface of the iron was in good condition except the scales in a part of the boiler; the mud drum appeared to be in pretty good condition; the whole head of the mud-drum attracted my attention from being very badly corroded; he broke off a piece which did not appear to be more than the one-eighth of an inch thick; when he saw this he was satisfied there was cause for accident in that part of the boiler; the rivets near this thin piece of iron were badly channeled; the thin part of the boiler was imbedded in the brick work, and on this account may have escaped notice. Mud drums are apt to corrode when in contact with the brick-work.

W. B. Levan, sworn—He also, in company with Mr. Roberts, examined portions of the boiler; all was in good condition except that part corresponding with the mud-drum; he did not think the thickness of the boiler was strong enough to resist the pressure of the steam used at the time of the explosion; my impression is that the mud-drum gave way.

Professor Wm. Morris, M. D., who entertains the theory that it is the force of electricity that causes steam-boilers to explode, was introduced by the Coroner, who said that, as Coroner, he desired all the light that could be thrown upon this subject. The venerable professor stated that when called upon by Coroner Taylor to appear, he thought it would be better to state his views briefly in writing. The Professor then read the following paper:

Mr. Coroner—Being here at your request, I will, with your permission, present a few thoughts on the subject of this judicial inquiry. And I shall submit my conclusions with the greater confidence, by reason of the scientific reputation of the intelligent jury now assembled.

It is usual to ascribe steam-boiler explosions to the expansive power of steam, and by this assumption the inquiries made are generally governed. But the cause assigned—as it is commonly thought of—is not equal to all the effects produced. The fulcrum requisite for steam power is supplied by a sound and well-constructed boiler, having its proper appliances well adjusted and secured. But if this fulcrum become defective, or the steam pressure be raised to an unreasonable height, the iron cylinder may indeed burst or be rent asunder by the expansive power of the steam, as commonly apprehended. But this possibility does not, and cannot, enable us to account for the great amount of *gravity* overcome, and the *projectile* power displayed, in the case of steam-boiler explosions and their attendant facts. The real and effective *cause* of those disastrous events must be otherwise sought and found. A thoroughly scientific attention must be given to the true and acknowleged doctrine of "*force*." The natural distinction subsisting between inert matter and active power must be considered, not in the abstract merely, but in relation to the subject of explosions and their results.

Force cannot be generated or in any way originated; for, everywhere, and in everything it exists, either in an active or in a latent state. It can only be excited, evolved, and applied. Neither can it be destroyed, but is readily convertible and its mutations are many and diverse. Force is essentially *one*, though its constituent principles are *three*, and its effective manifestations are many. And these effective manifestations are indicated by the familiar words light, heat, electricity, magnetism, gravitation, momentum, elasticity, chemical affinity, and muscular power.

I assign *electricity* as the effective cause of steam-boiler explosions. But while so doing I bear in mind that in assigning any one thing as the cause of another, it is necessary that the assigned cause should be shown to exist, and to be equal to the effect ascribed. But if it be shown that free electricity to an enormous amount is present in every steam boiler when "fired up," no reasonable man will be found to doubt of its being equal to the explosive and projectile power, and effects that are so frequently and so terribly displayed. And a brief notice of the natural history of water and of fire in relation to steam-power, will serve to show the existence and presence of the cause which is now assigned.

Water, though material, is more than matter, for it is matter in combination with *latent* force. We all know that water is composed of two gases, combined by an excess of electricity, and that in the natural state of water and electric equilibrium subsists. But it must also be considered that if an intense excitement, and a dominant accession of the radiative principle of electricity be occasioned within the boiler, the effect is what is called steam, and steam-power, and that the application of fire to the boiler occasions the excitement and the accession not within view.

Fire, though material, is more than matter, for it consists of matter in combination with *active* force. The principle of fire, under the name of caloric, is known to be a constituent in the solar light; and it is thus known to be a constituent principle of electricity, seeing that light and electricity are essentially one and the same.

Fire, as viewed in relation to the subject of present inquiry, is radiant heat. When fire is applied to the boiler, and the motions or vibrations, thereby occasioned, are communicated from particle to particle of the water within, the heat is said to be conducted. But when the particles of water, being greatly excited, have transmitted their vibrations to the air in the steam chamber, the heat within the boiler has become radiant heat, and this radiant heat is active and energetic electricity. By the radiant heat thus transmitted from the furnace, the natural electricity of the water is greatly excited, and its radiative principle, which is distinguished by intensity, is also greatly augmented, and the effect of this is steam and steam-power; or, to speak more accurately, steam-power consists in the mutual repulsion of minute molecules of water in the state of elastic vapor, as surcharged with radiative electricity, which is the real force evolved.

And it should be considered that, previous to any accession of electricity, as transmitted from the furnace, the amount contained in the water is enormous, and is very readily excited and set free. This has been noticed by Sir W. Snow Harris, in his description of the "*Hydro-electric Machine*," and Professor Faraday has made known that the amount of electricity contained in "*one grain*" of water is equal to that of a "*very powerful flash of lightning*." And by the continuous process of evolving steam power, this enormous amount of electricity, together with the great accession transmitted from the furnace, is in a state of the most intense excitement, and its constituents are, in great part, divorced and set free. For it is held to be fundamentally true that "the propagation of heat, at least in a metal, is always attended with the liberation of electric force; and again, 'whatever disturbs any one particle of matter, whether solid or fluid, the disturbing force especially if it be heat, liberates active electricity.'" And the disturbance of particles within the steam-boiler, when "fired-up," must of necessity be inconceivably great.

The effective cause of steam-boiler explosions has now been disclosed. But, while the *cause* is electric force, the *occasions* of explosion are many, and are variously induced. For instance: A deficiency of water in the boiler may be an occasion; and especially if by so, if the renewed supply be brought in contact with an incandescent, metallic surface, for decomposition, in part, would most likely ensue; and, even when the boiler is properly supplied, the water may come in contact with an incandescent surface, by reason of the formation and subsequent disruption of the calcareous deposit, technically called "scale."

Again: The application of an excessive degree of radiant heat may be the occasion of over-excited conditions. For the electric constituents divorced and liberated by the process of evolving steam power have each a natural tendency to reunite with its opposite; and, by virtue of this law, the radiated electricity accumulated in the steam chamber presses laterally and upward towards its opposite in the atmosphere, and, consequently, if there be an excessive degree of radiant heat transmitted from the furnace, an explosion will certainly ensue. But further: While there is an accumulation of radiative electricity in the upper cavity of the boiler, there is, also, a great accumulation of the magnetic principle in the lower part, where it is the effective cause of the formation of calcareous "scale;" the natural tendency of these divorced and contrastive principles to reunite within the boiler is controlled and hindered by the conditions necessary to the continuous evolution of effective steam—that is to say, they are kept asunder by the radiant heat, which is radiant electricity, issuing from the furnace and acting against its own kind in the steam chamber. But whenever the natural tendency of these two opposites is no longer thus controlled, and other internal conditions, inductive to the same result, concur—that moment they will rush to each other, and the instantaneous effect of their reunion will be a tremendous display of explosive and projectile power. Thus, even to the "letting down of the fire" may be the occasion of sudden disaster and death. There may be other occasions besides those now described. But, whatever may be the occasion, the *cause* of explosion is the excitement, disruption, and alienation of the contrastive forces of electricity within the boiler, in the process of evolving steam power. A question of exceeding importance arises: What means of safety will meet the exigencies of the case, as just described? The present advanced state of electrical science will, doubtless, furnish a full and practical reply. But, with becoming deference, I will now submit the thought of an electrometer, and of an electro-inductor, for directing a current of the radiative electricity from the steam chamber along the lower part of the boiler; and also an electro-escapement, for discharging the excess of free electricity into the atmosphere, or into the earth.

The evidence here closed. The jury will render a verdict this afternoon.

COAL STATEMENTS AND FINANCIAL.

Our correspondent at Scranton, sends us the following report of the amount of coal transported over the Delaware, Lackawanna and Western Railroad, for the week ending Saturday, April 30, and for corresponding time last year:

	Week. Tons. Cwt.	Year. Tons. Cwt.
Shipped North	4,688 13	83,49 00
Shipped South	18,806 10	340,892 04
Total	23,495 03	405,233 04
For corresponding time last year:	Week. Tons. Cwt.	Year. Tons. Cwt.
Shipped North	7,117 19	94,872 14
Shipped South	20,544 06	252,999 11
Total	27,661 15	347,872 05
Increase		56,310 19

The following are the receipts of the Delaware Division Canal Company for the week ending April 30:

For week to date	$5,022 10
Previously in 1864	16,826 38
Corresponding time last year	$21,849 48
	15,530 57
Increase	$6,318 91

BUSINESS CARDS.

REMOVAL.—Dr. R. J. LEVIS has removed to No. 1104 ARCH Street. ap27-1m

H. WILSON & BRO.—REAL ESTATE AGENTS and BROKERS, 429 WALNUT Street. Money carefully invested. Real Estate bought, sold and exchanged. Interest on Ground Rents, Mortgages and House Rents promptly collected; ap15-1m

JAMES M. SCOVEL, Attorney at Law, Master and Examiner In Chancery, 413 PLUM street, ap7-1m* Camden, N. J.

HAFFA & SMITH, GENERAL COMMISSION MERCHANT, FOR THE SALE OF FLOUR, GRAIN, MILL FEED, SEEDS, And Produce generally. No. 121 North WATER st., Phila. [ap5-1m*

ROBERT EWING, BILL BROKER, mh25-1y No. 109 South THIRD street.

GEORGE BOLDIN, MICHAEL WARTMAN, BOLDIN & WARTMAN, TOBACCO and GENERAL COMMISSION Merchants, No. 105 North WATER street and 106 North fe15 DELAWARE avenue, Philadelphia.

BOYS' CLOTHING, Boys' Clothing, Boys' Clothing, Boys' Clothing