THE MEMPHIS DAILY APPEAL.

BY JOHN S. C. HOGAN & CO. MEMPHIS, TENN., THURSDAY, FEBRUARY 21, 1867. VOLUME XVII.-NUMBER 90

MASONIC DIRECTORY.

HEBREW AND MASONIC CALENDAR.

A.·. M.·. 5627.

1 Tsri, 10th Septembe r,	1866.
1 Kheshvan, 10th October,	"
1 Chisleu, 9th November,	"
1 Tebeth, 9th December,	"
1 Shebat, 7th January,	1867.
1 Adar, 6th February,	"
1 Vendar, 8th March,	"
1 Nisan, 6th April,	"
1 Ijar, 6th May,	"
1 Sivan, 4th June,	"
1 Thamuz, 4th July,	"
1 Ab, 3d August,	"
1 Elul, 1st September,	"

Ash Wednesday, 20th February,	1867.
Maunday Thursday, 9th April,	"
Good Friday, 10th April,	"
Easter Sunday, 12th April,	"
Ascension, 23d May,	"
Pentecost, 31st May,	"
Saint Andrew's Day, 30th November in each year.	

MASONIC DIRECTORY.

1867.

LODGES.

ANDERONA, No. 168. Meets 1st Monday in every month, at Odd-Fellows' Hall, cor. Court and Main. D. C. Trader, W. M.; H. T. Tomlinson, Sec.

SOUTH MEMPHIS, No. 113. Meets 2d Friday of each month—Hall, cor. Madison and Second. J. T. Sellars, W. M.; Benj. K. Pallen, Sec.

LELA SCOTT, No. 264. Meets 1st Friday of each month—Hall, cor. Madison and Second. John Ainslie, W. M.; M. F. Woodward, Sec.

HAMILTON, No. 296. Meets 3d Friday of each month—Odd-Fellows' Hall. F. M. Stanley, W. M.; W. H. Betts, Sec.

KILWINNING, No. 341 (C. D.) Meets 4th Friday of each month—20 Front street. John J. Wendman, 32°, W. M.; R. K. Pulen, 32d, Sec.

ROYAL ARCH.

FENN Chapter, No. 4. Meets 2d Monday of each month—Odd-Fellows' Hall. A. J. Wheeler, H. P.; H. H. Poynter, Sec.

ENCAMPMENT.

EUREKA Council, No. 3. Meets 3d Monday of each month—Odd-Fellows' Hall. John Zent, Th. Ill.; N. J. Wiggin, Rec.

TEMPLARS.

CYRENE Commandery, No. 1. Meets 4th Monday of each month. John Zent, Comd.; N. J. Wiggin, Rec.

A.·. AND A.·. SCOTTISH RITE.

20 Front Street.

HERMES Lodge of Perfection, 10th; No. 1. Meets 4th Wednesday of each month. John Zent, 32d, G.·. M.·.; B. T. Tomlinson, 32d, Sec.·.

MEMPHIS Lodge of Perfection, 14th; No. 2. Meets 4th Wednesday of each month. George Mellersh, 32d, G.·. M.·.; A. E. Frankland, 32d, Sec.·.

CASIPHIA Council of Princes of Jerusalem, 16th; No. 1. Benj. K. Pallen, 32d, Tresh.·.; ——, Sec.·.

CALVARY CHAPTER of Rose Croix, 18th; No. 1. Charles Wickersham, 32d, M.·. W.·.; H. T. Tomlinson, 32d, Sec.·.

PHILIPPE DUPLESSIS Council of K.·.S.·.Mch., No. 1. Henry P. Wentworth, 32d, Comm.·.; William V. Grube 32d, Rec.·.

CONSISTORY of WEST TENNESSEE, 32d. John Ainslie, 32d, Comm.·. in Chief; Dodge C. Trader, 32d, Rec.·.

ST. PAUL'S ACADEMY,

HELENA, ARKANSAS.

THE Principal of this Academy begs to inform the parents and guardians of his pupils, and the public in general, that the

New School-Room and Dormitory

attached to the Academy are now ready, affording every accommodation for the advantage of pupils.

Prospectus can be had on application to

nov19 REV. R. J. COGAN, Principal.

JOHN McCOY, Agent,

PILCHER & BARROW,

(Successors to Pilcher & Goodrich and M. Pilcher & Co.)

COTTON & SUGAR FACTORS

—AND—

Commission Merchants,

No. 26 Factors' Row, Perdido street,

NEW ORLEANS.

Business conducted by M. Pilcher.

S. KIBBE,

DEALER IN

CHOICE FAMILY GROCERIES

Imported and Domestic

Wines, Liquors, Cigars and Tobacco,

Also all kinds of

CONFECTIONERY, NUTS, ETC.,

No. 412 S. Seventh Street,

Between St. Charles and Locust Streets,

ST. LOUIS, : : : : MO.

CASH paid for all kinds of Produce. sep26

J. C. FARGASON, A. CORDES, C. C. CLAY

FARGASON, CORDES & CO.,

Wholesale Grocers,

Commission Merchants,

And Dealers in

Plantation Supplies, Wines, Liquors, Cigars, Etc., Etc.,

NO. 328 FRONT STREET,

Memphis, : : : : : Tenn.

HAVE on hand and to arrive—

300 hhds of Pork;	50 casks Bacon;
500 hhds. Sugar;	50 hhds. Sugar;
200 pieces Bagging;	400 coils Rope;
50 bales India Bagging;	10 cases Brandy Cherries;
804 casks Pigeyoth Cassilio Brandy;	200,000 Cigars, various brands;
100 boxes Virginia Tobacco;	1000 bbls. Flour;
50 packages Tea;	200 coolies Western Tobacco;
500 bbls. Molasses;	100 baskets Piper Heidsick & Co's Celebrated Champagne;
300 bbls. Syrup;	150 kegs Molasses;
500 bbls. Salt;	100 bbls. Steel.
50 cases Brandy;	

sep26

A. P. BURDITT ANGUS CAMPBELL.

JOS. H. SMITH.

A. P. BURDITT & CO.,

COTTON FACTORS

—AND—

COMMISSION MERCHANTS.

OFFICE—At their old Grocery stand,

308 Front Street.

Memphis, : : : Tenn.

S. O. & T. A. NELSON & CO.

Cotton Factors

—AND—

COMMISSION MERCHANTS

No. 8 Jefferson Street,

MEMPHIS, TENN.

and No. 135 Gravier Street,

NEW ORLEANS, LA.

JOHN G. WALLACE & CO.

Commission Merchants

—AND—

WHOLESALE DEALERS

In Groceries and Plantation Supplies, 316 Front Street,

MEMPHIS, TENN.

WE have this day associated with us in business, W. D. McRAYNOR, of Memphis, and A. A. OGLESBY, of Panola county, Miss. JOHN G. WALLACE alone authorized to sign the firm name.

Aug. 20, 1866.—1m.o

WM. SIMPSON, Tuscumbia, Ala. | F. A. SANDERS, Memphis. | JOHN ROGERS, Memphis.

SIMPSON, SANDERS & CO.,

Successors to Simpson, Hays & Co.,

Cotton Factors

—AND—

GENERAL COMMISSION MERCHANTS

No. 256 Front st., MEMPHIS, TENN.

By giving our undivided attention to the sale of Cotton and other Produce, filling orders for supplies, etc., we hope to secure the patronage of the public. may1

Monsarrat & Montgomery,

AUCTIONEERS

—AND—

REAL ESTATE BROKERS,

Ayres Block,

Opposite Court Square.

WE have taken the spacious storehouse in the Ayres Block formerly occupied by Robeson & Mitchell, and will connect with the Real Estate Brokerage that of the Auction of Goods and Merchandise. The ample room we now have for the storage of goods and display of the same will give us unusual facilities in disposing to advantage any consignments that may be made to us.

Liberal Cash Advances made on consignments. MONSARRAT & MONTGOMERY.

feb6 3m

J. B. HOOD & CO.,

COTTON FACTORS

—AND—

General Commission Merchants,

100 Common S reet, opposite City Hotel,

J. B. HOOD, JOHN C. RAWELLS, FRED. S. THAYER. } NEW ORLEANS. feb5

MEMPHIS APPEAL.

PUBLISHED DAILY & WEEKLY

—BY—

JOHN S. C. HOGAN & CO.

PRICE OF SUBSCRIPTION.

Daily (in advance) per annum	$12 00
" " per week	25
To carriers and news-dealers, per copy	5
Weekly, per annum (in advance)	5 00

☞ No subscription entered on our mail books for a less time than one month.

RATES OF ADVERTISING.

One square one insertion	$1 00
" " each additional insertion	50
" " two weeks	4 00
" " one month	5 00

☞ All advertisements considered due after the first insertion.

☞ Eight lines of solid nonpareil constitutes a square.

☞ All advertisements in the Special Notice column will be charged 20 cents per line.

☞ Marriages and obituaries published as other advertisements.

☞ Advertisements to be inserted in the Weekly paper only, or at irregular intervals in either of the papers, will be charged $1 per square for each and every insertion.

☞ All advertisements not marked for a special time will be discontinued at the end of the week.

☞ All advertisements for the APPEAL must be handed in at the Clerk's desk.

☞ *Occasional advertisements must be paid for in advance.*

☞ No advertisement will appear in the Weekly papers except by special contract.

☞ Our friends are requested to use their best efforts to send us subscribers, and fill up our lists, and also to forward any items of news that may be of sufficient local importance to warrant their publication.

TERMS OF WEEKLY.

As an inducement to group clubs, we have adopted the following scale of prices, which are as low as our current office expenses will admit of:

One Copy, one year	$5 00
Twelve of ten or more, each	4 50
Twenty or more, each	4 00

Invariably in advance.

THE AMAZON.

Second Lecture by Prof. Agassiz on the Amazon and its Tributaries.

A large audience assembled in the hall of the Cooper Institute, to listen to the second lecture of Prof. Agassiz on Brazil. The special subject of his lecture was the Amazon and its tributaries. The professor began by giving an account of the facilities that were afforded him both by individuals and by the Brazilian government, for prosecuting his investigations and explorations. He described the mode in which they divided their labors, by sending different portions of the company to different parts of the country, and then said:

The chief point which I intended to explore was the geographical distribution of the aquatic animals. And here I must say what was the reason which induced me to make that investigation a specialty. There is no question now which engages so extensively and so deeply naturalists than that of the origin of living beings. Now, before anything can be done toward the coming in of this immense variety of living beings which people the surface of the globe, it seems natural that we should know the conditions under which these live in the localities over which they are spread, that these circumstances of their ordinary maintenance should be brought in as one element in the explanation of the problem. And yet with reference to aquatic animals our data are exceedingly meager. Of all the fishes of South America, the most that has been regarded thus far has been that they occur perhaps in Brazil, or in the northern rivers of South America, and the like. And no more precise indication have we of their whereabouts. From previous investigations I had already learned that within the range of the Mississippi, the Ohio, or of some of the Atlantic rivers, the inhabitants of these fresh water basins, are not the same for the whole length of the watercourse. That, for instance, in the headwaters of one stream there occur fishes which are not found in its middle course, and that with which are different from those found at its mouth; while some species may extend through the whole length. It became, therefore, particularly desirable for me to ascertain how it was with the inhabitants of the extensive fresh water basins of South America; and I sent out parties to explore the different basins. One party was to explore the rivers which emptied east of the coast range into the Atlantic, the Rio Paraiba, the Rio Doce, and others. These are some of them large streams of about the dimensions of our larger Atlantic rivers. Another party was to follow the pass of the mountain range and explore the head waters of the said region. Another party was sent into the valley of the San Francisco to make collections there while they were to explore the two main tributaries of that river, the Rio das Velhas, and the San Francisco proper; and then they were to follow the river its whole course, when they should divide, and one party course the mountain range into the sources of the Paraiba into the province of Piauhi, and from there to Maranhao, and to come in the end in Para, at the mouth of the Amazon. I remained a couple of months at Para, and then ascended the valley of the Amazon its whole length as far as it extends entirely within Brazilian territory, reaching Tabatinga, which is at the frontier of Peru, at the end of the journey. I did not penetrate further. I had at first intended to visit the Andes, but I found that the river Amazon alone was so full of interest, and contained so much that was attractive, that I thought it best, as it was hardly prudent, when I did not know how far an expedition in the Andes would be rewarded with success during the period of the political agitation which existed then in the lower provinces of Peru. So I decided to pass nearly a year—ten months—in the Amazon valley, that I might make myself thoroughly familiar with the condition of that country during almost every season of the year; to explore the character of the different rivers, and to study the subject of the distribution of the animals within that basin. It became thus necessary that I should extend the scope of the inquiry, and send out parties to others, so that we could, as it were, canvass the rivers simultaneously and make collections at one and the same time in different regions, so as to ascertain with precision how far the fresh water inhabitants of these rivers were circumscribed in their distribution, and how far they were liable to change their habitation, and to wander from one place to another. Every point which I had selected for examination was visited while going up, and again while going down, so that there should be an opportunity to compare the observations made at one season with those made at another season. I stationed some of my assistants at first on the Rio Topajos, some at first on the Xingu, and then afterward on the Topajos, then later at the mouth of the Rio Negro, sending a party up that river, and other parties west to Tabatinga, while I myself came back to examine the middle course of the river; and another party was sent off to the Ica, and another went to the Uenyali, so that we actually surveyed the principal tributaries of the Amazon with a great deal of care. The Rio Trombetas, which is one of the larger northern tributaries, was also the object of special examination. It thus happens that I could compare the work done in different parts of the empire by others with that which I did myself, and observations made in one locality with those made in another; and in that manner the results were minute, and covered a much larger area than I could have surveyed alone. And now allow me to call your attention a moment to the configuration of that region, that I may be able with more precision to refer to these rivers in the future lectures. The Amazon, as you see, flows nearly parallel to the equator in a west-easterly direction, more than two or three degrees, while its southern tributaries rise from twelve to fifteen degrees south, and its northern, from six to seven degrees north; so that the width of the valley at some points is nearly as great as its total length. The fact that this main portion of the Amazon flows in one and the same latitude, brings a result very different, with reference to climate, from that which we observe along the banks of other large rivers which flow in a north-southerly direction, as in south America, and in Africa. Our Mississippi begins its course in very cold regions and ends it almost in the tropics. The Nile begins under the equator, and further south, and terminates in the Mediterranean where the climate is always temperate. You see, therefore, that these rivers, as they flow on, under very changing climatic influences. Not so with the Amazon, which occupies a belt under the equator, and retains the same climatic conditions for its whole length, and would present a great monotony were it not for the peculiar character of its tributaries, and for the peculiar economy of the waters which fill its basin. Extending its trunk across the whole continent and sending its branches north and south over such a wide area, the basin of the Amazon establishes communication with all the adjoining republics of South America. And this is a point of great importance with reference to the fact that the Amazon is this year to be opened to the commerce of the world; for, in consequence of the natural physical relation of the Amazon, its tributaries, and the areas drained by these tributaries, the opening of the Amazon does not only bring the internal resource of Brazil into immediate contact with the commerce of the world, but also that of those republics, the surface of which is mainly drained by the tributaries of the Amazon. Mark how extensive this communication is. Here we have the Guianas—French, Dutch and English Guiana—then the province of Venezuela, through which flows the Orinoco, and which is connected directly with the Rio Negro through the Casiquiare, here we have the new republic of New Granada, the eastern rivers of which all empty into the Amazon, several into the Rio Negro, and others, such as the Japura and the Ica, empty into the Amazon. Then we have the republic of Ecuador, the principal rivers of which also empty into the Amazon. Then we have Peru, the three great rivers of which empty into the Amazon. Then the republic of Bolivia, the great rivers of which flow also into the Amazon. And finally, we have the rivers which come down from the table lands of Brazil, which drain two of the most fertile provinces of Brazil itself; the province of Matto Grosso, through which run Tapajos and Xingu flow, and the provinces of Goyas, through which the Araguay and the Tocantins flow to meet the Amazon; so that those countries which we are in the habit of considering only from their maritime site have an extensive area, which slopes toward the Amazon. When thinking of Venezuela we generally remember Caracoas: when we think of New Granada, it is to Panama that our thoughts fly; and when of Ecuador, it is in Guayaquil that we stop; when we think of Peru, it is at Lima; when we think of Bolivia, it is at Sucrella, or along the sea coast, or among the high mountains. You see the whole space of Bolivia, here this whole space of Peru, (pointing to the map), here this whole space of Ecuador, here this whole space of Grenada, here this whole area of Venezuela, and even some parts of the Guianas, all slope toward the Amazon, so that he who has a foot upon the mouth of these rivers has also the key to that internal trade with these provinces. You see, therefore, what an extensive prospect is open to the enterprise of seafaring nations by the mere fact that the navigation of the Amazon will be free as the sea itself to the merchantile shipping of all nations. [Applause.] You may realize what it is for us by considering for a moment what it would be to the shipping of England or of France, if the United States were at once to declare that the Mississippi be open to their navigation—if the flags of Europe could float at Cincinnati, or St. Louis, and all the tributaries of the Mississippi, as well as the main river itself, should be allowed to be navigated by foreign ships. It is that step which the emperor of Brazil has taken. It is thus that he has opened his country to the enterprise of the world, and no nation is more likely to be so greatly benefited by it as the people of the United States. [Applause.] Now, you may ask, "How can it be that a nation throws away its wealth in this manner and throws it open to foreigners?" Very serious considerations must have weighed in the scale to induce the government to divest itself to that extent of its external property. The case is simple. The whole valley of the Amazon has not yet been peopled. The whole tract of this country, which is as large as many empires in the first rank in the old world—the whole of that country drained by the Amazon does not nourish at this moment 250,000 individuals, including the Indians; and no doubt the government of Brazil has thought that the only way of settling that rich country was to offer inducements to all nations. Let me, therefore, say a few words of the character of that country and the facilities which are offered there for settlement, for commerce, and for travel. In the first place, when we speak of the valley of the Amazon, we ought to at once divest ourselves of the ordinary idea which we combine with the word "valley." There is not a bottom with walls or banks rising on both sides and forming an inclosure to the water that runs in the bottom of the valley. Here the basin of the Amazon is an extensive plain. If it be true that the slope is hardly more than a foot in ten miles; and over the whole of this extent of 2500 miles the slope is not more than 210 feet. It is only forty-five feet from Obidos to the sea shore, and it is only 200 feet from Sabatinga to the sea shore, and yet the distance is, in a straight line, over 2000 miles, so that really the slope is hardly a foot in ten miles. The impression to the eye is that of an absolute plain, and the flow of water is so gentle generally that in many parts it hardly seems to flow. It makes the impression of a fresh water ocean far more than a river, and the width of Panama compares favorably to its extraordinary length. There is not one channel through which the bulk of the water flows, but a multitudinous number of channels connected with one another in the most various ways, so that instead of travelling in a straight course, you may ascend the Amazon in any number of channels, and pass from one to another by any number of intersecting communications. And this net work of rivers spreads over an area which is sometimes 50, 80, 100, 150, or nearly 200 miles wide. In that region you have to travel for about 250 miles from the mouth of the Maderia before you come to the rising land over which the water falls in cascades. At the Tocatins and Tapajos and Xingu you have ascend 150 or 180 miles before you come to those higher grounds which determine rapids into water courses, and on the north side it is equally at a considerable distance from the center of the basin that the land rises into gates. Over the whole expanse of the valley, for hundreds of miles on either side of the main channel, the bottom of the valley is as flat at the side as it is in a longitudinal direction; so that it is an inundated plain, rather than a river; and if there are channels in which water flows more constantly than others, these channels are so frequently overflowed by the rise of the water, you have frequently, for a month at a time, the water covering this wide expanse without break. But there is a great difference in the character of these water courses, and a great difference also in the nature of the water itself. Before, however, I enter into details concerning the river, let me say a few words concerning the climate. The valley of the Amazon has a rather temperate climate. Though under the equator, it is not among the hottest parts of the globe. The hottest point of the earth's surface is very near to the north of the valley of the Amazon, along the northern shore of Guiana, and that part of the continent (referring to map). The valley of the Amazon is of milder temperature, owing to two circumstances; the extent of submerged land, with the constant evaporation, and the regular flow of the trade winds, which are constantly blowing in the face of the Amazon, and sending an air cooled by the amount of moisture received over the whole of its surface. The trade winds blow in the mouth of the Amazon and over the whole valley, so that there is an unusually cool breeze from the Atlantic to the base of the Andes, reducing markedly the average temperature of the valley. Indeed, the average temperature of the valley is only 84°. The maximum temperature is from 90° to 92°; the minimum about 78° to 79°. It is only along the Mainas and the junction of the Rio Negro that the temperature rises to 95°. The temperature between day and night is always perceptible, and toward morning she nights are always remarkably cool. Under these circumstances you see that from sharing the intensity of heat which characterizes tropical regions, the valley of the Amazon is favored to a degree which will make it a pleasant habitation for the people of our race. During nearly a year of residence there, I do not feel that the climate had the slightest unpleasant influence. My companions enjoyed it as well as I did; and, in fact, we found it was as agreeable a residence as we could wish, preferable to the intense heat of the dog-days, and so uniform as to save the inhabitants from those sudden changes of our climate that are so injurious to health. If the bracing air of our northern climate has a more stimulating influence upon the energies of man, we know how many it kills; it is the strong and healthy that survive; and many diseases which are the result of our northern climate are only cured by a residence at the south, while the south is saved from all these inconveniences, if it has some of its own. I would sum up my description of the valley of the Amazon as a healthy country, which will prove genial to the white race as much as any other part of the world having a similar temperature. I know that my statements are contrary to generally received notions, and that the valley of the Amazon, in particular, has a very bad reputation. But it does not deserve it; and the origin of this reputation is one which ought to be explained. It is owing to the reports of the officers of the government of Brazil, sent there to administer the affairs of the country, who, desirous of being relieved from a kind of exile in an unsettled land, and wishing to return to society, to the capital, or to the luxury they may have enjoyed, in order to accomplish that end, represent the country as injurious to health, and their residence there as a great sacrifice, deserving an advance in their social position; and that this is a true explanation, I have, by the acknowledgement of some gentlemen who had been there, and who had themselves played that game. [Applause.] Now let us look at the river and its banks. The average temperature of the water is 81°; the maximum temperature is 84°; the lowest temperature of the river is 77°-78°; so that the water is comparatively tepid. It is only the streams which flow through the forests that are temperate and cool. Where there is dense vegetation (and nearly the whole surface of the land is covered with it) you may find at all times cool water. The whole of this extensive area is covered by vegetation. This plain is not, like other plains under the tropics, partly desert and partly covered with vegetation—a vegetation so dense that it is almost impenetrable. Of its character I shall give some account at the close of this lecture. And now let me point out to you the fact that the river Amazon has three different regions, which present different aspects. At the lower turn of its course the two great tributaries join it, (one of them from the table lands of Guayanas, and the low lands between the Andes and Guayanas). The Rio Negro on its northern shores, and the Rio Madiua on its southern shore, which comes from the mountains of Bolivia and the Andes at that latitude. These two tributaries are so large that from their junction with the main stream the stream assumes a greater dimension. The whole basin is full of water after it has received these two tributaries, and it is that part alone which generally goes by the name of the Amazonas. The Rio Amazonas begins at the junction of the Rio Negro, and extends to the Atlantic. Above the junction of the Rio Negro, and through the territory of Peru, it is called the Rio Solimoes; and it receives from Peru to Rio Negro two very important tributaries on its northern side. One is the Ica, and the other the Japura. On the southern side it receives other tributaries, and then comes the Rio Madeira, to which I have already alluded. That part of the Amazon, which occupies the middle track of the continent, goes by the name of the Solimoes. The upper part, which is in Peru, and which comes down from the Andes, is called Maranon, and it receives tributaries on the northern side and on the southern. The southern shore of the Amazon, below the Madeira, receives the Xingu, Tanajos and Tacontins, all three of which flow from the northern slope of the table lands of Brazil. To the east of the Rio Negro there are a number of rivers which are hardly known among us by their names, and which are yet very important and remarkable for their peculiar character; very broad, but not long. One of them opens into the Amazon with a mouth of over thirty miles. The Tocantius presents a front of sixty miles, and it is only one of the smaller tributaries of the Amazon, so that as you reach its mouth it seems as if a broad ocean were spreading before you, and you were passing from the river into an open sea, instead of meeting an affluent of the river on which you navigate. So also the Xina; it is not over forty miles in length, and it is scarcely twenty miles in width, but these rivers are remarkable for their width. They are comparatively shallow, and their current is very light. The natural consequence is that they carry little material in suspension. Their waters are therefore clear, transparent, and somewhat tinged by vegetable substance, which is the result of the Tropical climate. If you take a glass of the Tocantins and those of the Xinga are a tinge of gray, those of the Tocantins about the same, a little yellowish; but all three are clear waters, as also are the rivers I have named before. There are other rivers of the same character which are tributary to the Madeira, that I do not mention them particularly. Now the Madeira is of a totally different character. It is a very deep river, which flows rapidly and carries with it a large amount of loose material, mud and whitish clay, so that its waters are turbid, of a milky color, and hence the Madeira is called the white water river. The Madeira is remarkable in this respect, that it receives tributaries on its western side, which are very deep, they are very tortuous; their course is not straight, but they are meandering. They are literally destitute of islands, while the Madeira has numerous islands. The consequence is that these rivers admit of navigation to a great distance. A major in the Brazilian army, who was my companion during the whole journey, and who is as familiar with the Amazon as our pilots are with the Mississippi, told me that he explored the principal course of the Purus for over 500 miles, and found the river navigable for vessels drawing from fifteen to eighteen feet for 2000 miles, so that really the slope is hardly a foot in ten miles. The impression to the eye is that of an absolute plain, and the flow of water is so gentle generally that in many parts it hardly seems to flow. 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At the Tocatins and Tapajos and Xinga you have ascend 150 or 180 miles before you come to those higher grounds which determine rapids into water courses, and on the north side it is equally at a considerable distance from the center of the basin that the land rises into gates. Over the whole expanse of the valley, for hundreds of miles on either side of the main channel, the bottom of the valley is as flat at the side as it is in a longitudinal direction; so that it is an inundated plain, rather than a river; and if there are channels in which water flows more constantly than others, these channels are so frequently overflowed by the rise of the water, you have frequently, for a month at a time, the water covering this wide expanse without break. But there is a great difference in the character of these water courses, and a great difference also in the nature of the water itself. Before, however, I enter into details concerning the river, let me say a few words concerning the climate. 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It is only along the Mainas and the junction of the Rio Negro that the temperature rises to 95°. The temperature between day and night is always perceptible, and toward morning she nights are always remarkably cool. Under these circumstances you see that from sharing the intensity of heat which characterizes tropical regions, the valley of the Amazon is favored to a degree which will make it a pleasant habitation for the people of our race. During nearly a year of residence there, I do not feel that the climate had the slightest unpleasant influence. My companions enjoyed it as well as I did; and, in fact, we found it was as agreeable a residence as we could wish, preferable to the intense heat of the dog-days, and so uniform as to save the inhabitants from those sudden changes of our climate that are so injurious to health. If the bracing air of our northern climate has a more stimulating influence upon the energies of man, we know how many it kills; it is the strong and healthy that survive; and many diseases which are the result of our northern climate are only cured by a residence at the south, while the south is saved from all these inconveniences, if it has some of its own. I would sum up my description of the valley of the Amazon as a healthy country, which will prove genial to the white race as much as any other part of the world having a similar temperature. I know that my statements are contrary to generally received notions, and that the valley of the Amazon, in particular, has a very bad reputation. But it does not deserve it; and the origin of this reputation is one which ought to be explained. It is owing to the reports of the officers of the government of Brazil, sent there to administer the affairs of the country, who, desirous of being relieved from a kind of exile in an unsettled land, and wishing to return to society, to the capital, or to the luxury they may have enjoyed, in order to accomplish that end, represent the country as injurious to health, and their residence there as a great sacrifice, deserving an advance in their social position; and that this is a true explanation, I have, by the acknowledgement of some gentlemen who had been there, and who had themselves played that game. [Applause.] Now let us look at the river and its banks. The average temperature of the water is 81°; the maximum temperature is 84°; the lowest temperature of the river is 77°-78°; so that the water is comparatively tepid. It is only the streams which flow through the forests that are temperate and cool. Where there is dense vegetation (and nearly the whole surface of the land is covered with it) you may find at all times cool water. The whole of this extensive area is covered by vegetation. This plain is not, like other plains under the tropics, partly desert and partly covered with vegetation—a vegetation so dense that it is almost impenetrable. Of its character I shall give some account at the close of this lecture. And now let me point out to you the fact that the river Amazon has three different regions, which present different aspects. At the lower turn of its course the two great tributaries join it, (one of them from the table lands of Guayanas, and the low lands between the Andes and Guayanas). The Rio Negro on its northern shores, and the Rio Madiua on its southern shore, which comes from the mountains of Bolivia and the Andes at that latitude. These two tributaries are so large that from their junction with the main stream the stream assumes a greater dimension. The whole basin is full of water after it has received these two tributaries, and it is that part alone which generally goes by the name of the Amazonas. The Rio Amazonas begins at the junction of the Rio Negro, and extends to the Atlantic. Above the junction of the Rio Negro, and through the territory of Peru, it is called the Rio Solimoes; and it receives from Peru to Rio Negro two very important tributaries on its northern side. One is the Ica, and the other the Japura. On the southern side it receives other tributaries, and then comes the Rio Madeira, to which I have already alluded. That part of the Amazon, which occupies the middle track of the continent, goes by the name of the Solimoes. The upper part, which is in Peru, and which comes down from the Andes, is called Maranon, and it receives tributaries on the northern side and on the southern. The southern shore of the Amazon, below the Madeira, receives the Xingu, Tanajos and Tacontins, all three of which flow from the northern slope of the table lands of Brazil. To the east of the Rio Negro there are a number of rivers which are hardly known among us by their names, and which are yet very important and remarkable for their peculiar character; very broad, but not long. One of them opens into the Amazon with a mouth of over thirty miles. The Tocantius presents a front of sixty miles, and it is only one of the smaller tributaries of the Amazon, so that as you reach its mouth it seems as if a broad ocean were spreading before you, and you were passing from the river into an open sea, instead of meeting an affluent of the river on which you navigate. So also the Xina; it is not over forty miles in length, and it is scarcely twenty miles in width, but these rivers are remarkable for their width. They are comparatively shallow, and their current is very light. The natural consequence is that they carry little material in suspension. Their waters are therefore clear, transparent, and somewhat tinged by vegetable substance, which is the result of the Tropical climate. If you take a glass of the Tocantins and those of the Xinga are a tinge of gray, those of the Tocantins about the same, a little yellowish; but all three are clear waters, as also are the rivers I have named before. There are other rivers of the same character which are tributary to the Madeira, that I do not mention them particularly. Now the Madeira is of a totally different character. It is a very deep river, which flows rapidly and carries with it a large amount of loose material, mud and whitish clay, so that its waters are turbid, of a milky color, and hence the Madeira is called the white water river. The Madeira is remarkable in this respect, that it receives tributaries on its western side, which are very deep, they are very tortuous; their course is not straight, but they are meandering. They are literally destitute of islands, while the Madeira has numerous islands. The consequence is that these rivers admit of navigation to a great distance. A major in the Brazilian army, who was my companion during the whole journey, and who is as familiar with the Amazon as our pilots are with the Mississippi, told me that he explored the principal course of the Purus for over 500 miles, and found the river navigable for vessels drawing from fifteen to eighteen feet for 2000 miles, so that really the slope is hardly a foot in ten miles. The impression to the eye is that of an absolute plain, and the flow of water is so gentle generally that in many parts it hardly seems to flow. It makes the impression of a fresh water ocean far more than a river, and the width of Panama compares favorably to its extraordinary length. There is not one channel through which the bulk of the water flows, but a multitudinous number of channels connected with one another in the most various ways, so that instead of travelling in a straight course, you may ascend the Amazon in any number of channels, and pass from one to another by any number of intersecting communications. And this net work of rivers spreads over an area which is sometimes 50, 80, 100, 150, or nearly 200 miles wide. In that region you have to travel for about 250 miles from the mouth of the Maderia before you come to the rising land over which the water falls in cascades. At the Tocatins and Tapajos and Xinga you have ascend 150 or 180 miles before you come to those higher grounds which determine rapids into water courses, and on the north side it is equally at a considerable distance from the center of the basin that the land rises into gates. Over the whole expanse of the valley, for hundreds of miles on either side of the main channel, the bottom of the valley is as flat at the side as it is in a longitudinal direction; so that it is an inundated plain, rather than a river; and if there are channels in which water flows more constantly than others, these channels are so frequently overflowed by the rise of the water, you have frequently, for a month at a time, the water covering this wide expanse without break. But there is a great difference in the character of these water courses, and a great difference also in the nature of the water itself. Before, however, I enter into details concerning the river, let me say a few words concerning the climate. 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