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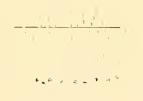
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The Southern Cotton Spinners'

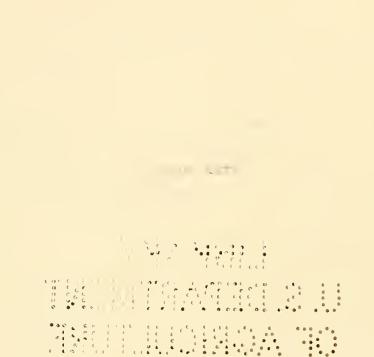
Association.

UNITED STATES OF AMERICA.



1901.

CHARLOTTE, N. C. Observer Printing House. 1901.



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A53

CONSTITUTION AND BY-LAWS

 \mathbf{OF}

.

The Southern Cotton Spinners' Association.

Adopted at CHARLOTTE, N. C. United States of America. June 10th, 1897.

Revised at CHARLOTTE, N. C. United States of America. May 11th, 1899.

> Amended at Annual Meeting, May 10th, 1900.

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Constitution.

ARTICLE I.

NAME.

SECTION I. This Association shall be called THE SOUTHERN COTTON SPINNERS' ASSOCIATION.

SEC. 2. May have a common seal, reading "The Southern Cotton Spinners' Association, Incorporated."

ARTICLE II.

OBJECT.

SECTION I. To increase intercourse of the Southern Cotton Manufacturers with each other.

SEC. 2. To assist in eliminating evils of the manufacturing interests, both in relation of mills to each other, and the commission houses with which they deal.

ARTICLE III.

MEMBERSHIP.

SECTION I. Active Membership.—"Any person who is a stockholder to the extent of \$1000 in a Southern cotton mill, and who is actively engaged as president, agent, manager or superintendent, in the manufacture, printing or finishing of cottons, shall be eligible for active membership, but each mill shall have only one vote.

SEC. 2. All nominations for membership shall be considered by the Board of Governors, and reported to the meeting, favorably, or adversely, for the action of the Association, provided, that in case the Board should decide to report adversely upon any nomination, the member who shall have made it shall be informed of the intention so to report in order that he may have opportunity to withdraw the name. Upon favorable report, active members may be admitted if they obtain a majority of votes of the members present, and voting therefore, by acceptance in writing and paying an admission fee of \$5.00 and maintain their membership dues each and every year. Any member failing to pay his dues within thirty days after date upon which they may be called, shall cease to be a member. Any member may withdraw from the Association upon payment of arreatages, first giving notice of his intention so to do in writing to the Secretary, and the Board of Government may accept such resignation, and any member may be expelled for cause at any regular meeting, two-thirds of the members present voting therefor.

SEC. 3. Associate Members.—Persons engaged in the manufacture or sale of textile machinery, or anything kindred to cotton manufactures, superintendents of, or stockholders in textile plants, may become associate members of the Association. The methods of application, nomination, election and withdrawal from the Association shall be under the same conditions as those provided for active members, Article III, Sec. 2, excepting that this class of membership does not carry with it the privilege of voting or speaking, except by permission of the Board of Governors, or a vote of the Association to allow permission. The initiation fee for the associate members shall be \$5.00, and the annual dues shall be \$5.00, payable as provided in Article III, Sec. 1, for active members. Associate members may be expelled by a majority vote of the Board of Government. SEC. 4. Honorary Members.—Honorary members may be elected when recommended by the Board of Government at any regular meeting of the Association and participate in its proceedings without the right to vote. They should not be subject to admission fee assessments. Any person actively engaged in Cotton Manufacture shall not be eligible to honorary membership.

SEC. 5. It shall be the duty of all members of the Association to make returns to the Secretary of such statistics as may be called for by him under the direction of any committee duly appointed for the collection of statistics when not incompatible with private interest.

ARTICLE IV.

OFFICERS.

SECTION 1. Shall consist of a President, Vice-President, Secretary and Treasurer, and a Board of Nine Governors, to be elected by the members at their regular Annual Meeting. After the election of the Board, there shall be determined by lot, three members, whose term of office shall be one year, three others for two years, and the remaining three for three years, and each succeeding year three members of the Board shall be elected in place of those retiring.

ARTICLE V.

SECTION I. This Constitution may be altered at any regular or call meeting of the Association by a vote of twothirds of those present.

By=Laws.

ARTICLE I.

ACTIVE MEMBERSHIP.

SECTION I. Any person who is actively engaged as President, Treasurer, Agent or Manager in the manufacture, printing or finishing of cottons, shall be eligible for active membership, but each mill shall have only one vote.

SEC. 2. All nominations for membership shall be considered by the Board of Governors and reported to the meeting favorably or adversely for the action of the Association, provided that in case the Board should decide to report adversely upon any nomination the member who shall have made it shall be informed of the intention so to report in order that he may have opportunity to withdraw the name. Upon favorable report active members may be admitted if they obtain a majority of votes of the members present and voting therefore by acceptance in writing and paying an admission fee of \$5.00 and maintain their membership dues of \$5.00 each and every year. Any member failing to pay his dues within thirty days after date upon which they may be called shall cease to be a member. Any member may withdraw from the Association upon payment of arrearges, first giving notice of his intention so to do in writing so the Secretary and the Board of Government may accept such resignation and any member may be expelled for cause at any regular meeting, two-thirds of the members present voting therefor.

ASSOCIATE MEMBERS.

Persons engaged in the manufacture or sale of SEC. 3. Textile Machinery or anything kindred to cotton manufacture or superintendents of, or stockholders in Textile plants, may become associate members of the Association. The methods of application, nomination, election and withdrawal from the Association shall be under the same conditions as those provided for active members, Article I, Section 2, excepting that this class of membership does not carry with it the privilege of voting or speaking except by permission of the Board of Governors, or a vote of the Association to allow permission. The initiation for the associate members shall be \$5,00 and the annual dues shall be \$5,00 payable as provided in Article I., Section 2, for active members. Associate members may be expelled by a majority vote of the Board of Government.

HONORARY MEMBERS.

SEC. 4. Honorary members may be elected when recommended by the Board of Government at any regular meeting of the Association and participate in its proceedings without the right to vote. They should not be subject to admission fee assessments. Any persons actively engaged in cotton manufacture shall not be eligible to honorary membership.

SEC. 5. It shall be the duty of all members of the Association to make returns to the Secretary of such statistics as may be called for by him under the direction of any committee duly appointed for the collection of statistics when not incompatible with private interest.

ARTICLE II. MEETINGS.

SECTION 1. Annual meetings shall be held on the second Thursday of the month of May in each and every year for the purpose of electing officers and such other busines, as may come before the Association.

SEC. 2. At the annual meetings officers shall make their reports.

SEC. 3. The President and Board of Governors, or a majority of those present, may call a general meeting of the Association at any time, at least five days' written notice being given by the Secretary and Treasurer.

SEC. 4. The President and four of the Board of Governors shall constitute a quorum for the transaction of business.

SEC. 5. At regular and special meetings of the Association, one-third of the members of the Association shall constitute a quorum for the transaction of business.

ARTICLE III.

ELECTIONS.

SICTION I. At the annual meetings there shall be an election for the selection of a President, Vice-President and Secretary and Treasurer, each of whom shall hold their office for one year or until their successors are elected. There shall also be an election of three members to serve on the Board of Governors, each of whose terms shall be for three years or until their successors are appointed.

SEC. 2. Any vacancy occurring by death, resignation, or otherwise, shall be filled by the officers and Board of Governors.

ARTICLE IV.

DUTY OF OFFICERS.

SECTION I. The President shall preside at all meetings of the Association and Board of Governors; he shall appoint all committees, not otherwise ordered; submit to the Board of Governors, for their consideration and discussion, all matters which, in his opinion, the interest of the Association may require, shall have full power to call a meeting of the Board of Governors at any time when in his opinion it may be necessary.

SEC. 2. In the absence of the President, the Vice-President shall attend to all his duties.

SEC. 3. It shall be the duty of the Secretary and Treasurer to record the proceedings of the meetings of the Association and the Board of Governors. He shall receive all dues and other monies due the Association from members or other sources. He shall provide all books necessary and keep a correct account of all receipts and disbursements. In case of death or removal from office, his books and papers shall be subject to the control of the Board of Governors. He shall pay all orders authorized by the President or Board of Governors.

SEC. 4. The Board of Governors, together with the President and Vice-President, shall form the Council of Administration.

SEC. 5. In the absence of both the President and Vice-President at meeting, the Chairman of the Board of Governors shall be the presiding officer.

SEC. 6. In the absence of the Secretary and Treasurer, the President shall appoint some qualified person to perform his duties.

ARTICLE V.

COMMITTEES.

SECTION I. Finance.—To consist of three members of the Board of Governors, who shall have general supervision of the finances of the Association.

SEC. 2. Ways and Means.—To consist of three members of the Board of Governors, who shall have supervision over all matters pertaining to the Association which may be referred to them.

ARTICLE VI.

MEMBERSHIP FEES AND DUES.

SECTION 1. Membership fee shall be \$5.00 per year, which amount covers all dues and financial obligations.

ARTICLE VII.

AMENDMENT.

SECTION 1. These By-Laws may be altered or amended by a vote of two-thirds of the whole number of the Board of Governors.



Order of Business.

Prayer. Address of President. Report of Secretary and Treasurer. Report of Committee on Finance. Report of Committee on Ways and Means. Report of Special Committees. New Business. Election of Officers. Adjournment.



Officers.

(Elected May 10th, 1900.)

PRESIDENT.

DR. JNO. H. MCADEN, CHARLOTTE, N. C.

VICE-PRESIDENT.

J. P. VERDERY, AUGUSTA, GA.

SECRETARY AND TREASURER.

GEO. B. HISS, CHARLOTTE, N. C.

BOARD OF GOVERNORS.

D. A. TOMPKINS, Chairman, Charlotte, N. C. A. C. MILLER, Shelby, N. C. J. C. SMITH, Newton, N. C. R. S. REINHARDT, Lincolnton, N. C. B. E. WILLINGHAM, Macon, Ga. LEROY SPRINGS, Lancaster, S. C.

OFFICE OF THE ASSOCIATION.

No. 41 South College Street, Charlotte, N. C.

U. S. A.

Officers of the Association.

(Past and Present.)

PRESIDENTS.

COL. J. T. ANTHONY, 1897-98. D. A. TOMPKINS, 1898-99 DR. JOHN H. MCADEN, 1899-1901.

VICE-PRESIDENTS.

A. P. RHYNE, 1897-99.

J. P. VERDERY, 1899-1901.

BOARD OF GOVERNORS.

A. A. Shuford, 1897-98. R. J. Stough, 1897-98. R. S Reinhardt, 1897-1901.* A. C. Miller, 1898-1902.* J. T. Anthony, 1898–1900.* W. C. Heath, 1899-1901.* Col. Leroy Springs, 1899-1902.* A. P. Rhyne, 1899-1903.*

P. M. Brown, 1897-99, J. C. Smith, 1898-1901.*

B. E. Willingham, 1900-1903.*

SECRETARY AND TREASURER.

GEO. B. HISS, 1897-1901.*

*Term expires.

A. M. Price, 1897-98. D. R. Julian, 1897-98. R. R. Ray, 1898-1903.*

- D. A. Tompkins, 1899-1902.*

Members of Association.

January 1st, 1901.

Members of the Association are respectfully requested to report to the Secretary any inaccuracy in the following lists:

HONORARY MEMBERS.

Col. J. T. Anthony (1st Pres.,) Charlotte, N. C.

ACTIVE MEMBERS.

Abernathy, J. A., Pres. & Treas. Lincoln Cotton Mills, Lincolnton, N.C. Aderholt, D. W., Sec. & Treas. Vivian Cotton Mills, Cherryville, N. C. Ashe, John R., Sec. & Treas. York Cotton Mills, Yorkville, S. C. Amory, Arthur, Pres. Indian Head Mills in Alabama, Boston, Mass. Acree, I., Sec. Jonesboro Cotton Mill Co., Jonesboro, N. C. Arnold, H. C., Prest. Wahoo Manufacturing Co., Newnan, Georgia.

Beaty, J. M., Sec. Atherton Mills, Charlotte, N. C.

Barron, J. R., Pres. & Treas. Manchester Cotton Mills, Rock Hill, S. C.

Brown, Geo. H., Sec. & Treas. Long Island Cotton Mills, Statesville, N. C.

Bryant, S., Treas. Naomi Falls Manufacturing Co., Randleman, N. C.

Beach, E. C., Agt. Massachusetts Mills in Georgia, Lindale, Ga.

Blythe, T. Ashby, Prop. Ashby Cotton Mills, Marion, S. C.

Bruce, W. R., Treas. & Mgr. Toccoa Cotton Mills, Toccoa, Ga.

Bemis, Judson S., Sec. & Treas. Home Cotton Mills, St. Louis, Mo.

Baker, P. S., Sec. & Treas. Crowder's Mountain Mills, King's Mountain, N. C.

Battle, Thos. H , Treas. Rocky Mount Mills, Rocky Mount, N. C.

Carpenter, L. A., Treas. Mailen Cotton Mills, Maiden, N. C.

Carpenter, D. M., Sec., Treas. & Supt Providence Cotton Mills, Maiden, N.C. Clark, D, Sec & Treas. Ada Manufacturing Co., Charlotte, N. C. Crowley, John, Prop. Crowley Mills, Charlotte, N. C. Clemens, E N., Sec. & Treas. Eagle & Phœnix Mills, Columbus, Ga. Cone, Cæsar, Pres. Proximity Manufacturing Co., Greensboro, N. C. Cheswell, W. E., Pres. & Treas Cheswell Cotton Mills, Westminster, S. C. Chafee, John W., Pres. Sibley Manufacturing Co., Augusta, Ga. Cooper, D. J., Pres. Anderson Cotton Mills, Anderson, S. C. Clark, Louis W., Pres Hucomuga Mills, Greensboro, N. C. Cooper, D Y., Pres. Henderson Cotton Mills, Henderson, N. C. Chatham, H. G , Sec. & Treas. Chatham Manuf 'g Co., Elkin, N. C. Dootson, Jas. H., Agt. Athens Manufacturing Co., Athens, Ga. Dustin, W. H., Prop. Eagle Mills, Lawrenceburg, Tenn. Dilling, Freno, Pres. Dilling Cotton Mills, King's Mountain, N. C. Dixon, J. K., Sec. &. Treas, Trenton Cotton Mills, Gastonia, N. C. Devenish, D. G., Sec. & Treas. Asheville Cotton Mills, Asheville, N.C. Duncan, T. C., Pres. & Treas. Union Cotton Mills, Union, S. C. Edwards, L. F., Pres. & Treas. Malison Braided Cord Co., Athens, Ga. Everett, W. N., Sec. Great Falls Manufact'g Co., Rockingham, N. C. Fries, John W., F. & H. Fries, Winston, N. C. Fairley, A. M., Treas. & Supt. Tarboro Cotton Mills, Tarboro, N. C. Fountain, W. E., Pres. Four tain Cotton Mills, Tarboro, N. C. Gregory, Jas. G., Sec. & Treas., Elizabeth City Cotton Mills, Elizabeth City, N. C. Gooding, J. B., Treas. Anniston Manufacturing Co., Anniston, Ala. Goodwin, Geo. C., Sec. & Treas. Mooresville Cotton Mills, Mooresville, N. C. Glynn, Martin P., R. A. Blythe, Philadelphia, Pa. Heath, B. D., Pres. Manetta Mills, Lando, S. C. Heath, W. C., Sec. & Treas. Monroe Cotton Mills, Mouroe, N. C. Hawke, J. W., Sec. Coosa Manufacturing Co., Piedmont Ala. Hickman, T. I., Pres. & Treas. Graniteville Manufg Co., Augusta, Ga.

Hutchison, C. E., Sec. Nims Manufacturing Co., Mt. Holly, N. C.

Howell, Geo. A., Treas. Reidsville Cotton Mills, Charlotte, N. C.

Hardison, W. C., Sec. Wadesboro Cotton Mills, Wadesboro, N. C.

Holt, Eugene, Gen'l Manager Aurora Cotton Mills, Burlington, N. C.

Hardaway, J. R., Gen. Mgr. Opelika Cotton Mills, Opelika, Ala.

Hough, James D., Gen. Mgr. Manchester Manufg Co., Macon, Ga.

Holt, R. L, Sec. & Treas. Glenco & Elmira Mills, Burlington, N. C.

Holt, E. C., Pres. Delgado Mills, Wilmington, N. C.

Hunt, B. W., Pres. Middle Georgia Cotton Mills, Eatonton, Ga.

Hiss, Geo. B , Pres. Rhodhiss Manufacturing Co., Granite Falls, N. C., (Charlotte, N. C.)

James, A. M., Supt. W. R. Kindley Cotton Mills Co., Mt. Pleasant, N. C. Joiner, G. A., Sec. & Treas. Talladega Cotton Factory, Talladega, Ala. Jordan, W. T., Mgr. Mountain Island Cotton Mills, Mt. Holly, N. C.

Johnston, C. W., Sec. & Treas. Highland Park Manufacturing, Co., Charlotte, N. C.

Jones, P. P., Sec. & Supt, Cherry Cotton Mills, Florence, Ala.

Jones, Arthur L., Asst Sec. & Treas. Peoples' Cotton Factory, Montgomery, Ala.

Lineberger, A. C., Treas, & Supt., Tuckaseege Manufacturing Co., Mt. Holly, N. C.

Lillard, Thos. J., Sec. & Treas. Elkin Manufacturing Co., Elkin, N.C. Ledbetter, T. B., Sec. Ledbetter Manufact'g Co., Rockingham, N. C. Lattimore, T. D., Pres. Buffalo Manufacturing Co., Stubbs, N. C. Latta, C. G., Pres. Raleigh Cotton Mills, Raleigh, N. C.

London, John R., Pres. & Treas. Victoria Cotton Mills, Rock Hill, S. C. Leak, Jas. P., Pres. & Treas. Leak-Wall & McRae, Rockingham, N. C. Love, Edgar, Treas. Daniel Manufacturing Co., Lincolnton, N. C.

Moore, J. D., Sec. Modena Cotton Mills, Gastonia, N. C.

McAden, J. H., Pres. McAden Mills, McAdensville, N. C. (Charlotte, N. C.)

Miller, A. C., Prop. Belmont Cotton Mills, Shelby, N. C.

McLendon, W. J., Pres. Wadesboro Cotton Mills, Wadesboro, N. C.

Miller, R. B., Mgr. Lauraglenn Cotton Mills, Shelby, N. C.

Miller, R. M., Jr., — , Charlotte, N. C.

Mallonee, J. N., Sec. & Treas. Red Bluff Mills, Clio, S. C.

Monroe, Dr. J. P., Pres. Linden Manufacturing Co., Davidson, N. C.

Mebane, B. Frank, Pres. Leaksville Cotton Mills, Spray, N. C.

Mauney, W. A., Sec. & Treas. Long Shoals Cotton Mills, Long Shoals, N. C.

Maginnis, A A., Pres. Maginnis Cotton Mills, New Orleans, La.

28

- McColl, D. D., Pres. Bennettsville Manuf'g Co, Bennettsville, S. C.
- Morrison, J. G , Prop. Mariposa Cotton Mills, Mariposa, N. C.
- McAlister, J. Worth, Sec. & Treas. Worth Manufacting Co, Worthville, N. C.
- Mauney, J S, Mgr King's Mountain Manufacturing Co., King's Mountain, N. C.
- McKinnon, A. J., Pres. Maxton Cotton Mills, Maxton, N. C.
- Marrs Paul J., Sec. & Treas. Henderson Cotton Mills, Henderson, Ky Moses, Altamont, Sec. Sumter Cotton Mills, Sumter, S. C.
- Morton, John W., Agt. Star Thread Mills, Athens, Ga.

MacRae, Donald, Treas Wilmington Cotton Mills, Wilmington, N C.

McCrary, Pres. & Treas (T J.) Newberry Cotton Mills, Newberry, S C.

Moore, J. S., Sec & Treas Richland Mills, Columbia, S. C.

- Mauney, S. A., Sec. & Treas. King's Mountain Manufact'g Co., King's Mountain, N. C.
- Moore, J. S., Sec. & Treas. Richland Cotton Mills, Columbia, S. C.
- Neave, E, B., Sec & Treas. Vance Cotton Mills, Salisbury, N. C.
- Nesbit, W. C , Sec. & Treas. Cedar Falls Mills, Cedrus, S. C.
- Newlin, S. G., Sec. & Treas. Randleman Mfg. Co., Randleman, N. C. Nichols, Wm. G., Springstien Mills, Chester, S. C.
- Neisler, C. E., Supt. King's Mountain Manufacturing Co., King's Mountain, N. C.
- Orr, Jas. L., Pres. Piedmont Mills, Greenville, S. C.
- Pegram, E. L., Sec. Stanley Creek Cotton Mills, Stanley Creek, N C. Phinizy, Stewart, Sec. Augusta Factory, Augusta, Ga.
- Pratt, T. W., Pres. &. Sec. West Huntsville Cotton Mills, Huntsville, Ala.
- Price, A. M., Pres. Eureka Mills, Chester, S. C.
- Pipes, D. W., Pres. Clinton Mills, Clinton, La
- Reinhardt, R. S., Sec. & Treas. Elm Grove Cotton Mills, Lincolnton, N. C.
- Ray, R. R., Sec. & Treas. McAden Mills, McAdensville, N. C.

Rhyne, A. P., Pres. Mt. Holly Cotton Mills, Mt. Holly, N. C.

Rankin, John C., Supt. Spencer Mountain Mills, Lowell, N C.

Rhodes, J. M., Sec. & Tres. Gaston Mfg. Co., Cherryville, N. C.

Ragsdale, J. S., Sec Oakdale Cotton Mills, Jamestown, N. C.

Rosenau, D. L., Sec. Tuscaloosa Mills, Tuscaloosa, Ala.

Rennie, T. H., Supt. Granite Mfg. Co , Graniteville, S. C.

30

- Ragan, Geo. W, Arlington Cotton Mills, Gastonia, N. C.
- Robertson, C. H., General Manager Waynman Cotton Mills, Waynmanville, Ga
- Shuford, A. A., Sec & Treas. Granite Falls Manufacturing Co., Hickory, N C.
- Steele, S. W., Supt. Great Falls Mfg. Co., Rockingham, N. C.

Springs, Leroy, Pres. Lancaster Cotton Mills, Lancaster, S. C.

Smith, J. A., Pres American Spinning Co., Denison, Tex.

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Swift, Thos. M., Pres. Pearl Cotton Mills, Elberton, Ga.

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Schenck, H. F. Pres. Cleveland Cotton Mills, Lawndale, N. C.

Schenck, John F., Manager Cleveland Cotton Mills, Lawndale, N. C. Sherrill, J. B., Sec. Lippard Varn Mill, Concord, N. C.

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Turner, C. L., Sec. Monbo Cotton Mills, Monbo, N. C.

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Williamson, Wm. H., Agent & Supt. Pilot Cotton Mills, Raleigh, N. C.
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34 TWENTIETH CENTURY PUBLICATION.

Speir, Morgan B., So. Bell Telephone Co., Charlotte, N. C. Stratton, W. H., Factory Insurance Co., Hartford, Conn. Thompson, E. W., D. A. Tompkins Co., Charlotte, N. C. Tate, R. A., Charlotte Supply Co., Charlotte, N. C. Tillinghast, Geo. E., Tr. Tillinghast, Stiles Co., Providence, R. I.

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MEMBERSHIP.

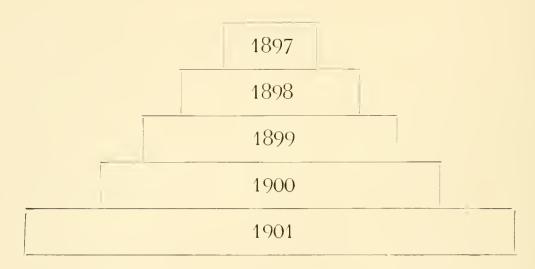
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RELATIVE GROWTH OF MEMBERSHIP.

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Next Annual Meeting will be held in Charlotte, North Carolina, Thursday, May 9th, 1901.



proceedings.

The Southern Cotton Spinners' Association in Annual Convention May 10th, 1900, at 10 o'clock A. M. in the Mecklenburg County Court Room, Charlotte, N. C.

Called to order by President J. H. McAden.

Opened with prayer by Rev. Dr. J. W. Stagg.

A. C. Miller moved that visitors in the city who are directly or indirectly associated with Cotton Spinners be invited to take a seat on the floor of the convention. Seconded—D. A. Tompkins. Adopted.

D. A. Tompkins—The newspaper correspondents have requested that a register be prepared, and all those who are in attendance at this meeting be requested to register their names and the business they represent, as a convenience to the newspapers and that we may know who are here.

President—In accordance with the above take due notice and register your names accordingly.

Address by President, Dr. J. H. McAden.

Gentlemen of the Southern Cotton Spinners' Association:

I congratulate you on so large an attendance upon this Convention. The occasion is an interesting one. The eye is unusually bright, the countenance gives evidence of a joyous heart, all is light and gay.

A long period of depression is at an end, every industry is prospering, every man who can work and will work can find employment at good wages, money is easy, the finances of the country are on a sound and safe basis, confidence is restored, a bright future awaits us, and we may confidently look for a period of industrial development unequaled in the history of this country. [Applause.]

We have with us representatives of the manufacturing interests in cotton and other fabrics from all over our broad land, and it gives us great pleasure to give them a most cordial welcome at all our meetings. There will be no division of territory, no Mason and Dixon's line with manufacturers; we are all together in one common interest and one common cause. [Great Applause.]

We are exceedingly glad to have representatives here with us from that time-honored institution, The New England Manufacturers' Association, and especially to have one of its distinguished ex-Presidents to address us during the sitting of this Convention, on the subject of the manufacturing of Cotton Goods. I have long wanted to go a step further than this, and see a joint meeting of this Association with the New England Association, at some central point, where we could meet together and discuss questions of great interest on industrial developments. [Renewed Applause.]

Gentlemen, it is good for us to come together in touch with each other. It broadens our views and brings us into more intimate business relations.

The increased development in manufacturing in the South in the last few years is wonderful. More than two and one-half millions of spindles have been placed in the mills in the last year. Plants are going up all along its great avenues of trade, and latent energy of its magnificent water powers is being equipped with the latest development, and is transmitted by electricity to its cities, giving employment to our labor, thus harnessing the offerings of nature to the chariot of utility. The additional capital invested in mills will amount to more than sixty millions of dollars in the last year.

We are endeavoring to convert the raw material into manufactured products, and to find a good market in foreign countries. Our export trade alone with the Empire of China, without any organized efforts on our part, will exceed twenty-five millions of dollars.

We should favor and urge a permanent and vigorous policy on the part of our general government in favor of the "Open Door Policy" with the Empire of China, and we should hold and govern the Philippine Islands, which are destined to become the distributing centre of the Eastern World, and make our country the centre of Eastern Civilization. [Applause.]

I hope to see this Association take decided action on this great question of public policy. While the Cotton Spinners are only indirectly interested, as only a limited amount of yarns is exported, yet every pound of yarns goes into various fabrics, which must find a market either here or in foreign countries.

We have with us at this meeting, invited here by your Board of Governors, the President of the National Manufacturers' Association, Mr. Theodore C. Search, who will address you on the very great and important point and explain to you the necessity of building warehouses to store and exhibit our products in foreign lands. [Applause.]

The National Manufacturers' Association is diligently laboring in every possible way to extend our trade and has accomplished great good. The great hope of the South is in its manufactures. This is the real road that leads surely to industrial upbuilding, to wealth and to power. We ask for no class legislation. With extended commercial relation with foreign countries, new territory opened up before us, we can plant our products wherever our flag floats, and successfully compete with the world. [Great applause.]

This country produces nearly three-fourths of the cotton in the world, a large portion of which is of the very finest and best grades. We have the most intelligent labor and operate the most improved machinery. We must exert

ourselves to extend our trade with other countries. Gentlemen, I speak candidly to you when I say we must look to the future if we continue in our progressive work in industrial development. The great problem of over production must be met and the only rational solution is in the building up of our foreign trade. The time will come when we shall need it, and we must recognize the necessity and act for the future.

Your Board of Governors had introduced in a called meeting of this Association a series of resolutions declaring in favor of the "Open Door Policy" with China, building of the Nicaragua Canal, laying the Pacific Cable, and placing us in direct communication with the great Orient, bringing us in trade relations with nine hundred millions of people.

These resolutions were passed unanimously. I would recommend that these resolutions be considered by a full meeting of the Association. The House of Representatives of your National Congress has passed the bill for the building of the Canal by a very large majority. It now needs the concurrence of the Senate. The people are almost a unit for it; they are ahead of their representatives. [Renewed applause.]

Now, gentlemen, I desire to make a few suggestions in regard to matters that are of especial importance to our Southern States. We should give strong expressions in favor of a liberal appropriation on the part of the State Governments for building and maintaining Textile Schools, which will educate our operatives in textile science as well as in its practice. It is due to them that we do it, and we should most willingly bear our proportion of the taxation to accomplish this great work. We should also favor a liberal appropriation by the State government for common school system and supplement this fund by a liberal appropriation on the part of the mill corporation to educate the children of our operatives free from any cost to them. [Applause.] It will be a good investment for us, and be of lasting benefit to the rising generation. Its like casting bread upon the waters; it will come again. There are many things we could do which we ought to do for their personal comfort—make the tenement houses comfortable, adopt improved system of ventilation and sanitary regulations, build churches, school houses, provide libraries. They learn rapidly and improve their condition by contact.

We should do all in our power to erect a high standard of morals, and elevate and dignify labor; make them feel that each one has a personal interest in the plant and its success.

The operatives are nearly all our own people. They come from the agricultural districts along the foot-hills of the Piedmont belt. Their condition is much improved by the change. They have better educational and church privileges. They are happy, contented and loyal to our interests.

The crowning glory of cotton factories of the South is that they make the women of our rural districts wage earners and self-supporting, and enable them to care for and comfortably support their aged and infirm parents in the decline of life.

In order that the ideas and intentions of this Association may be constantly kept before the minds of the members, I deem it wise that at this meeting we take some action looking to the establishment of weekly or monthly publication which shall honestly and earnestly aid in fostering the objects for which this Association has been organized. That the members of this Association may have the benefit of the most reliable and authentic market quotations of the raw material which they buy, the manufactured products which they sell; a publication such as would commend itself, not only to every manufacturer of cotton goods, but one which would commend itself to the man who produces the cotton, the workman who manufactures the cotton, the stockholder who has money invested in cotton manufacturing plants, the commission merchant who markets the manufactured product, and in fact to every one who is directly or indirectly interested in the cotton manufacturing business. By the means of such a medium as this our export trade could be greatly enlarged, and through such a medium the members of our Association could aid and assist in having adopted such national laws as would improve our facilities for securing an increased export business. I have only time here to enumerate a few of the many ways in which such a publication would be of advantage to our great and growing industry. Every one interested will thus be in possession of the most reliable information obtainable regarding the cotton trade, and by the establishment of this publication the members of this Association may be themselves posted, in order that they may be thoroughly competent to educate and to do what is best for those who are employed by them.

I desire, therefore, to lay stress upon the fact that I view this matter most favorably, and sincerely hope that it will be put in proper form, so that it can come before this Association, and the proper steps taken looking to the establishment and publishing of a magazine or periodical such as would meet the requirements of this Association, and in connection with this publication, I further desire to suggest that arrangements be made whereby the policy to be pursued in connection with this publication be very closely under the control and guidance of the officers and the Board of Governors of our Association.

Your Board of Governors have very wisely adopted the course of inviting distinguished men from all over this country to make addresses before this convention of manufacturers on important subjects directly connected with cotton mill industry.

The program embraces such distinguished men as Sydney Paine, of New England, on "Electric Power Transmission;" Geo. Otis Draper, of Massachusetts, on "Improvements in Cotton Mill Machinery;" Arnold B. Sanford, of Boston, on "Manufacture of Fine Cotton in the South;" our own Mr. Tompkins, of Charlotte, on "Steam Power; its Economy;" the distinguished Arthur Lowe, of Massachusetts, former President of the New England Manufacturers' Association, on "The Production of Finer Cotton Goods by American Manufacturers;" Leonard Paulson, of New York, on "Sale of Cotton Yarns;" the "Development of American Shipping," by that great friend of the South, and who has done more for the Southern development than any man in this Union, Mr. R. H. Edmonds, editor of the Manufacturers' Record, of Baltimore. [Applause.]

We will also have an address by the Hon. John Barrett, former minister to Siam, whose long residence in that country and his great familiarity with the Orient and its trade will be of great interest to us. [Applause.]

This is a most happy selection of distinguished speakers.

The experience with cotton manufacturers for a long number of years has convinced us that it is like the ebbing and flowing of the tide. We have our period of depression and our times of active business. We have gone through with the depression for a number of years; we are now on the high tide. [Applause.]

The wave of prosperity is exhibiting itself in every branch of business. We need have no fear for the future; diversify your products, make good yarns and cloth, stand to your contracts and require the same good faith on the part of those who purchase your products, out of your earnings pay fair dividends to stockholders, expend whatever is necessary to put your plant in first-class condition, put the balance to surplus, as you may need it to keep your labor employed in dull times, and to tide over periods of depression. Keep in touch with your commission merchant by going into the market where your product is sold. Your factor will always be glad to welcome you and give you all the information in his power. The expense of your trip is nothing compared to the benefit you will receive.

Now, gentlemen, my term as your presiding officer will expire this day. It has been a great pleasure to me to be a member of this Association, and a distinguished honor to preside over its deliberations. By your kindness and courtesy you have aided me very much, for which I am profoundly grateful.

I am of you and with you, and my parting message to you is to set your face to the morning and keep step with the progress and development of the age. All will be well with you.

Ex-President of the New England Manufacturers' Association, Mr. A. H. Lowe invited to take a seat on the rostrum with President J. H. McAden.

President McAden—All applications for membership will be submitted to the Secretary. All parties who make application for active membership now, will be allowed privilege of discussion on the floor.

Secretary Hiss—Application blanks are now on the Secretary's table and all who wish to join the Association may have these blanks—fill them out and accompany same with \$5.00, and then the application will be acted upon by a committee; a suspension of rules can take place, and any gentleman in the room that desires to become a member can do so in this way. Fill blanks out and accompany with \$5.00 and this will cover all dues to April 1st, 1901, which is the end of our fiscal year. Those who desire membership as active members will then have all privileges of discussion as active members on this floor. Associate members are not allowed this privilege unless so ordered by the Board of Governors.

Geo. E. Wilson—Would it not be a good idea for the Secretary to read the revision as suggested in reference to membership in the Association.

Secretary ordered to read the revision.

Secretary reads:

"REPORT OF COMMITTEE ON WAYS AND MEANS."

It is suggested that Article 3, Sec, 1, be changed so as to read, "Any person who is a stockholder to the extent of \$1,000 in a Southern Cotton Mill, and who is actively engaged as President, Treasurer, Agent, Manager or Superintendent, in the manufacture, printing or finishing of cottons, shall be eligible for active membership, but each mill shall have only one vote."

D. A. Tompkins moves that the amendment as prepared by Ways and Means Committee and acted upon by the Board of Governors, be put before the Association and voted upon.

Seconded by R. S. Reinhardt. Unanimously adopted.

Secretary reads the qualifications of Associate members. R. R. Ray moved that an intermission of five minutes be granted so as to allow time to act upon application. Seconded by A. C. Miller. Adopted.

Convention called to order again and addressed by Mr. Theo. C. Search, of Philadelphia, President National Manufacturers' Association. Subject: "Foreign Markets for American Goods and the Way to Develop Them."

Address by Theodore C. Search.

There is probably no branch of American industry to which are presented such possibilities of expansion as are offered to the cotton goods manufacturers of the United States in the opportunities for developing their trade in foreign markets. And to this statement should be coupled the fact that none of our great industries have fallen so short of the realization of these possibilities as has the cotton goods trade. The present is hardly a time when export trade is likely to be a very captivating subject to discuss with the cotton manufacturers of the United States, except with those who are willing to look some distance into the future and to forget for the moment the conditions which immediately surround us.

With such a demand in the home market at prices which cannot be obtained elsewhere, it is not suprising that cotton manufacturers, like all other producers, feel disposed to devote all their energies towards making the most of present opportunities, leaving consideration of what may follow until there is less urgency in current business. Four years ago when we were in the depths of business depression every manufacturer was ready to give instant attention to any proposition that offered to bring orders for his goods, and those who turned their efforts towards finding foreign outlets for their products found relief which the depressed and congested home market could not afford.

It is strange how quickly the lessons of adversity are forgotten in the flush of prosperity, how deaf are many manufacturers to admonitions to look out for a repetition in the future of the dismal experiences of the past. If there be any one lesson which I would impress upon you more strongly than another at this time, it is the necessity for making provision now for this reaction which must surely follow this era of great prosperity.

Now, above all times, is the opportunity to develop foreign markets, or at least to lay the foundations for a great trade in all our manufactured products in foreign countries. Never can our manufacturers afford so well as now to spend a little of their time, money and energy in this work.

Foreign trade does not wait, ready-made, for whoever comes to seek it. It can be had only by patient and continued effort; and, too, many of our manufacturers are ignoring this fact and expect to "look into the matter when business slacks off at home." The manufacturer who follows this policy will pay heavy penalty when the next period of depression comes along.

The United States is the greatest cotton growing counin the world, producing twice as much as all the other countries combined. There is present here every condition necessary to make this the greatest cotton manufacturing country. We have two-thirds of the world's raw cotton right here in the South, water-power to drive euough spindles to spin every pound of cotton we grow, or if steam power be preferred there is the cheapest coal in the world. Labor is abundant and cheap, capital is not lacking for any legitimate enterprise, climatic conditions are all that is required, and when the goods are made they can be carried to the seaboard for shipment to a foreign market at lower transportation charges than are imposed in any other country for similar distances.

And yet in spite of all these advantages only 32 per cent. of the cotton grown in the United States is spun and woven here, 68 per cent. of the raw fibre being shipped to other countries—none of which enjoy the advantages we have to be manufactured into yarn, cloth and thread and distributed throughout the world. In the calendar year 1899 the exports of raw cotton from the United States amounted to \$191,167,342, while the exports of cotton cloths were only \$19,968,475 in value. For every dollars' worth of cotton cloth exported last year ten dollar's worth of raw cotton was furnished to manufacturers in Great Britain and on the Continent of Europe, and by them made into goods which could just as well be manufactured here.

These conditions ought to be reversed. The exports from the United States should show nine-tenths cotton goods and one-tenth raw cotton.

The most striking evidence of the insignificance of the United States in the cotton goods export trade of the world is found in a comparison of the exports from the principal countries. The appended table shows the figures for 1897, including cotton yarns, thread and piece goods of all kinds :

Great Britain	\$310,270,994
Germany	47,297,204
France	23,030,304
Switzerland	23,879,691
United States	21,037,678
British India	17,837,560
Holland.	16,923,798
Spain	11,942, 2 61
Japan	6,718,117
Belgium	4,317,410
Austria Hungary	2,793,285

Total...... \$486,048,302

From these figures it will be seen that Great Britain, without a pound of homegrown cotton, controls 63.6 per cent. of the export trade of the world in manufactures of cotton, while the United States producing two-thirds of the world's supply of raw cotton, does only 4.3 per cent. of the export trade in the various manufactured cotton products. Germany, France and Switzerland each lead the United States in exports of cotton goods, and it is only within a few years that we have passed Holland and Japan in this trade.

Until within the past five years the position of the United States in the export trade in cotton manufactures has undergone but slight change. In 1877 the exports first reached a value of \$10,000,000, and it was not until 1896 that the figures passed \$15,000,000, the total for that year being \$16,837,396. Since then the increase has been more rapid, and the exports during the year ended June 30, 1899, were the largest on record, amounting to \$23,566,914.

Consideration of these facts naturally leads one to ask why the United States has so small a share and progresses so slowly in the world's trade in manufactures of cotton. Some of the reasons can be cited with little difficulty. One of the principal causes is found in the peculiar conditions which govern the sale of the products of the cotton mills, conditions which are not generally found outside of the textile industries. Very few cotton mills do their own selling, but dispose of their product entirely through commerchants, who are given exclusive mission control of the sale of the output. The mill, therefore, does not come directly into touch with the purchasers, either at home or abroad, and knows of trade conditions, requirements and possibilities only at second-hand.

The number of middlemen who take profits at various stages between the mill and the foreign consumer tends also either to reduce the proceeds for the manufacturer or to increase the cost to the buyer. In many cases, in the China trade for example, the mill passes its goods through its regular commission house, thence through a broker, thence through a commission export house in New York to the importing merchant in China or elsewhere.

In such a procession as this no one of the intermediaries has any particular interest in the trade beyond the profits of his own part in the transaction. Where the goods come from or to whom they are going finally is of little moment. Some methods of handling the export trade in cotton goods are too cumbersome to permit of very rapid growth, and the mill and the consumer must get closer together if larger trade is to result.

If I am pardoned for saying it, I will venture the opinion that the conservative policy of American commission houses, and manufacturers as well, has been something of a determent influence. Both have manifested reluctance to conform to the requirements of the foreign buyer. I know of one instance in which a commission house declined a

sample order for about \$2,000 worth of brown sheetings which were wanted by a very heavy buyer in the Levant, and the only reason for the refusal was the buyer's request for an extra label in characters which the commission merchant said he could not understand.

In another instance a sample order for about 1200 pounds of yarn, with prospects of a large and regular trade, was refused by a southern mill on the ground that the bales required by the buyer were different in size from those usually packed by the mill. It was suggested by the mill that if the buyer would order 200,000 pounds the yarn would be baled as stipulated. It is needless to say, however, that the buyer did not take the hint.

The requirements of the various foreign markets in matters of width, length and finish of goods, assortments of colors, size and style of packing, marks, labels, etc., and finally the terms of payment, are all important factors in development of foreign trade. Unwillingness to comply with these requirements is responsible for the loss of a vast amount of trade which should have come to American mills.

It is attention to these details that gives Great Britain over \$400,000,000 worth of this trade, annually, and without compliance with these requirements American manufacturers never can secure the share of this business to which they are properly entitled by virtue of their natural advantages and their mechanical and commercial ability.

The difficulties which are encountered in the development of foreign trade are less serious than they appear when first viewed by a manufacturer whose whole business life has been devoted to the production of goods for a market immediately at hand among his own people. There is no obstacle to the opening of foreign outlets which will not vanish quickly before the determined effort of the American manufacturer. There is nothing in the requirements of the foreign buyer of cotton goods which our manufacturers cannot meet just as easily and just as readily as their English and European competitors.

When asked to change his methods to meet the wants of the foreign buyer the manufacturer often hesitates and then declines because he doubts whether it will pay to depart from his long established methods. There is in the United States much of a disposition to wait for foreign trade before preparing to care for it, a policy that practically guarantees that the trade will not come.

It is gratifying to note, however, that many cotton manufacturers are equipping themselves to handle export trade, are preparing to meet foreign requirements to the fullest degree, and are reaching out for direct connections with large buyers abroad. Within the past three days I have received a letter from one of the largest cotton manufacturing corporations in the United States asking me to suggest a man competent to locate in China as their resident selling agent. This is but an indication of a policy that is becoming more and more general as interest in the export trade grows and assumes practical form.

No American industry has so much at stake in the future of the Orient as the manufacture of cotton goods. China has always been the largest market for American cotton goods, having taken in the calendar year 1899, \$10,273,487out of a total of \$19,698,471 worth of exports of piece goods. In the same period Great Britain exported to China \$25,548,141 worth of similar goods. When we consider, however, that there are 400,000,000 people in China, most of whom are clothed wholly in cotton fabrics, it can be seen that our present trade there is trifling in comparison with the possibilities of that market.

The China trade in American cottons is of long standing and American brands are probably better known than in other foreign country. The advantage is distinctly on our side in that market, and most of the trade that England now controls there would probably be ours, were it not for

the predominance of British influence in the commerce of China and the almost entire absence of American merchants in that country.

It is a striking feature of the situation that the bulk of the American cotton goods sold in China are handled by British merchants. It is easy to see that the establishment of strong American houses in China would very largely increase the sale of our goods there.

It was with this end in view that the National Association of Manufacturers undertook the establishment of a sample warehouse in Shanghai which is now receiving the first shipment of samples from the United States. About seventy of the largest manufacturers of the United States are represented in this warehouse, and the showing of the goods under such favorable auspices cannot fail to give great impetus to American trade in China.

The last letter received from the manager of this warehouse refers with much emphasis to the possibilities of the cotton goods trade in China, and mentions an English salesman who has just gone home with orders for piece goods amounting to \$200,000.

This whole subject of foreign trade in cotton goods is so inviting, so interesting and so expensive that one might talk for hours without more than introducing the topic. It is the one matter above all others which the cotton manufacturers of the United States must consider with much care and thought. Just at this moment there is little need of additional outlets for the products of their mills, but the conditions of two and three years ago will surely return, and in even more serious and oppressive form.

The building of new mills continues at a rapid rate and when another era of depression shall appear—as it will without possible doubt—the discrepancy between supply and demand in the home market will be more alarming than ever. To guard against such disaster either there must be a stoppage of new construction and a curtailment of production, or new outlets must be created for the large surplus of goods which the home market cannot absorb.

This is an era of expansion and no progressive manufacturer will undertake to argue that no more mills should be built or that the production of existing plants should be restricted. The proper course is that which will broaden the industry and extend its trade. There need be no fear that we shall ever have too many cotton mills in the United States; the only danger is that we shall have a market too small and too limited to dispose of their output.

Foreign trade offers a ready solution of the whole problem. I believe we should build all the mills we can and run them day and night if necessary; but look abroad for new markets, instead of allowing surplus stocks to accumulate and prices to decline because of a glutted market.

Pursuit of such a policy will enable cotton manufacturers of the United States to run their mills continuously and at a profit, and will permit indefinite expansion of the industry. This is the only course which good business judgment and progressive ideas can sanction. [Much applause.]

Address by Mr. Arthur H. Lowe, of Fitchburg, Mass., ex-President of the New England Manufacturers' Association.

Address of Mr. Arthur H. Lowe.

Mr. President and Members of the Southern Cotton Spinners Association:—I assure you that I appreciate more than I can express, your invitation to attend this convention and speak at this meeting.

I shall never forget or fail to appreciate, the royal reception, hospitable welcome, and entertainment that our New England Cotton Manufacturers Association, of which I was at one time an officer, received from you Southern Manufacturers here in Charlotte, and in the other cities

that we visited when we attended the exposition at Atlanta in 1895, and I would be ungrateful indeed if I did not renew my thanks at this time, which I do most sincerely, and bring the congratulations and good wishes of the New England Association.

When I contrast the condition of cotton manufacturing here as I saw it, upon my first visit, in 1886, with the conditions as they exist now, I congratulate you most heartily and assure you that I cherish for you the highest admiration.

After my return North from that first visit, I had considerable to say among Northern manufacturers, about your facilities and advantages for cotton manufacturing here in the South, and predicted that your enterprise would grasp and develop the opportunities, and that you would soon become a great factor in the cotton manufacturing of the world.

It was said by some of my friends in criticism that I was overstating the case, but I submit that the results as they exist to-day more than justify my prophecies.

You gentlemen by your enterprise and sagacity have made a conspicuous reputation, known and read the world over, for yourselves and your section, and deserves highest credit for your achievments.

You cotton manufacturers have done the South more good, than the representatives of any other industry, because your mills and benefits, are more scattered and come nearer to the needs of the people.

You will remember that Emerson said :

"Give fools their gold and knaves their power, Let fortunes bubbles rise and fall, Who herds a field or trains a flower, Or builds a mill is more than all.

It would seem as if Emerson referred to the great need of your section when he wrote that last line. 56

I congratulate you upon the harmonious and co-operative spirit that has existed among you manufacturers and your employees.

I congratulate you upon the encouragement and loyal support that your enterprises have received from State, county and city governments.

And while I believe some National legislation would be beneficial, may you never suffer from the adverse and hampering laws existing in our section. I congratulate you upon the untiring and persistent support that you have had from the public press, especially would I mention the *The Manufacturers' Record*, *The Textile Excelsior*, and of similar textile and mechanical papers, which have been and are, conspicuous instrumentalities of your success.

I congratulate you manufacturers upon the establishment in your section of textile schools.

All honor to one of your members, who has done such noble work in this cause.

Their value in years to come will be inestimable.

I believe that your advantages, and past experiences in cotton manufacturing, your present successes and your preparations for the future, are fitting you to meet successfully any competition of the future, except possibly your own over-production.

Gentlemen, I would like to continue complimenting and congratulating you upon your splendid achievements; upon the marvelous increase in the quantity of your product, and the improvement of its quality; upon your enlarged and promising export business, which you must retain at all hazards; upon the confidence that you have inspired by your successes, and upon the active and vastly profitable condition of your industry in these McKinley times, but I am reminded that your Board of Governors through your secretary, invited me to deliver an address upon the subject, "The Production of Fine Goods by American Manufacturers." I accepted the invitation and consented to speak upon this subject, because I know so little about it, and of course you know that a man usually speaks most willingly about those things that he knows the least about.

I did decide, however, that my remarks should have the merit of brevity.

I am afraid you will be disappointed if you expect me to give you any suggestions of scientific, mechanical or statistical value. My remarks will be simple assertions, and repetitions of well known ideas which it is well to consider occasionally.

In the first place I could find no scientific formula that determined between course and fine cotton goods, and I don't believe you care to have me go into a dissertation about the number of yarns to be used, or the picks per inch required to make fine goods; to discuss the use of Jacquards, Dobbys, Leno or Lappet motions or recommend any machinery.

This could only be done interestingly and intelligently with samples of goods before us.

Neither can I give you any idea as to the number of spindles or looms producing fine goods, nor any idea as to the yards or value of fine good produced or marketed in this country.

This depends very much upon where the line is drawn between course and fine goods, and the general business conditions prevailing in the country.

However, there are several interesting and important problems to consider in connection with the production of fine cotton goods. An American manufacturer who would produce fine goods, should have a good deal of courage, consider carefully first of all, what the product shall be, its degree of fineness and its market and the greatest of these is the market.

He must decide if the product will be fine yarns, or fine plain cloths for printing, or converting, or fine fancy cloths in fancy weaves or fancy colorings and stick to it. He cannot jump from course to fine at will.

As you are to have an address upon the subject of fine yarns by one who is better qualified than I am to speak upon the subject, I will confine my remarks to the production of fine finished colored goods, and the market and sale of such goods. I hope that the gentlemen, who speaks to you upon the manufacture of fine yarns, will not fail to discuss and emphasize the importance to spinners of fine yarns, who sell their production in yarns establishing a reputation for the quality of their product, and the necessity of maintaining that reputation.

Put the name of your mill upon your products and require your agents to sell the goods as from your mill. Let the buyer know that you make good yarns and merit his trade. The domestic comsumption of fine cotton goods as compared with coarse cotton goods is limited, and the possibilities of exporting such goods is very remote. The millions consume the cheaper and more durable goods. The few wear the delicate and more perishable fabrics. The value of fine goods depends more and more, as the cost advances, upon their attractiveness in texture, coloring, and finish, and more or less upon the taste, appreciation and caprice of the buyers.

The risks in making finished fine cotton goods ready for consumption, are many fold more than the risks upon the coarser and staplier goods.

The percentages of depreciation when sold under pressure are larger. The guarantee 80 x 88 -40s worth $6\frac{1}{2}$ to $6\frac{3}{4}$. Sold after printing and finishing at 5c.

The very fine high cost fancy cotton goods, cost so much to make that buyers easily pass to silk, worsted, or fine woolen fabrics. So much of the cost of fine goods is labor that the American manufacturer of such goods cannot compete with the foreign, unless he has a reasonable tariff sufficient to encourage and protect him.

And, gentlemen, you Southern cotton manufacturers ought to give help and support to such a tariff.

The American manufacturer of fine goods is terribly handicapped by the prejudice of buyers against domestic, and in favor of foreign made goods. I am afraid our wives and daughters are not quilters. Just as meritorious cotton goods are made by American manufacturers, as can be made anywhere in the world, and will be if the American manufacturers can have the support of the buyers, and consumers of America.

At your mills, we examine and test thoroughly, all the different foreign, and many of the domestic made goods, of which we can obtain samples that compete with our goods, and we find that the American made goods of similar classes are equal in fabrication, as fast in colors, more durable, and far better value to the consumer, than the foreign made goods.

The American designers are producing as artistic and beautiful patterns and effects as any of the foreign products.

When the American consumers realize this, and will be loyal to our home products, the foreign goods will be driven out of the market. Now the manufacturers of fine yarns for weaving or the manufacturers of fine goods for converting, must be made to realize the importance of their part, in producing the perfect finished products.

That we cannot make a silk purse out of a sow's ear is just as true now as it ever was, consequently the selection of the material is all important, whether it be the selection of cotton for the production of fine yarns, or the selection of fine yarn for the production of fine cloth.

Buy your cotton of reputable concerns, and always buy a little better quality than you seem to require. Buy your yarns of spinners, who have established reputations, and who furnish just what they agree to, or a little better. Having determined to make fine finished goods, the utmost care must be taken to procure an organization of TWENTIETH CENTURY PUBLICATION.

management and overseers, who by nature and training have the taste and skill to produce the desired results.

The most important factor in the production of fine goods successfully, is brains and skill in the organization. The desire and ambition to make the best goods of their class, must permeate both principals and subordinates. The taste, skill, patience and perseverence required to make fine goods, is of slow growth.

Some have said that it must be inherited.

You will bear in mind that we are considering the production of goods that require something more than mere mechanical ability. The manufacture of such goods as we are considering, depends more upon brains and taste than upon bricks and mortar and machinery. Here is where the training of the textile school becomes of great value, and almost a necessity.

The manufacture of such goods, is a fine art, and requires an experience, taste, and skill almost unknown to the production of the coarse staple goods.

The simplest part of the whole matter is to carefully select the location, get good engineering ability to plan and arrange the mill; buy the best up-to-date machinery, and start it up. The successful manufacture of fine goods does not depend upon any of these conditions, for I have seen beautiful fine goods that were made in not the best location, nor in the best built or best arranged mill, nor upon the latest or best machinery, still the better conditions are all important, and will assist in producing the desired results. I believe that the external conditions about the mill, such as pleasant homes for the help, shade trees, well kept lawns, shrubs, flowers, clubs and reading rooms for employees. The best club I have ever seen in connection with a cotton mill is at the Eagle and Phoenix mill here in Georgia. Cleanliness and order and good discipline in the mill are absolute necessities.

The spirit of cleanliness that is next to Godliness is

what is wanted. Clean operatives with clean hands, clean machinery, clean floors, and clean windows are required if you will make clean, attractive goods.

Good light must be had at all times, whether natural or artificial. I believe that the one story saw-tooth building with the North light is the best for weaving fine goods.

Steady speed and proper humidity are necessary.

All these conditions are important in the manufacture of the coarser grade of goods, but they are more needful in the production of the finer goods.

I have had no experience in the bleaching or printing of fine cotton cloths, but I know, that that branch of the industry requires educated and refined ability in the designing departments, high prices and skillful workmen in the printing department and very expensive and perfect machinery.

In the dye house and in the coloring of fine yarns I can tell you from experience, that eternal vigilance is the price of success. Utmost care must always be taken to prevent broken or snarled yarn and the waste of expensive dye stuffs, you cannot afford to waste high priced yarns or dye stuff purchased by the ounce.

Knowledge and experience of a high order are required to produce shade, brilliancy, delicacy and always absolutely fast colors. A whole address could be delivered upon this branch of the manufacture of fine goods.

Now with the proper materials, beautifully colored printed or woven into fabrics, designed and dete mined with the greatest amount of foresight and taste that it is possible to display, we come to the finish of the fabrics, which is so important that the whole effort will be a faiiure if the finish and put up are not exactly right. So important is this part of the manufacture of fine goods to the handling and sale of such goods, that it must not be overlooked.

The appearance of the goods in bands and tickets ready

for sale, must be so pleasing that the most critical buyer will be convinced of their merit and value.

The sample cards showing the goods in their various combinations and colorings and fancy weave effects, must be made with great care and attractiveness, and in many cases in such expensive shape and quantities as to add greatly to the selling expense.

The goods we have been considering are made for and are only sold in seasons, some lines having sale in only one season in the year, and some lines having sale in two or more seasons.

The carrying of these goods from one season to another is an important feature, involving much capital, insurance, storage, and other expenses. And now, gentlemen, in conclusion I will tell you in confidence, that the profits on such goods as we have been considering are not as large as they should be, when you consider all that has been involved of work and worry and risk in their manufacture and sale.

I hope that I have not discouraged any one, who is ambitious to make fancy colored cotton goods, by what I have said; it was far from my intention to do so.

I have simply blazed the way through some of the experiences and difficulties that will certainly be encountered by any one who undertakes the enterprise.

Simply mentioned some of the chafed and sore spots of one who has had these experiences.

D. A. Tompkins—I wish to report a communication sent Mr. Search from Mr. D. M. Thomson, President of the New England Manufacturers' Association, expressing his regret not being able to attend.

Secretary read letters from the Queen City Telephone Co., also the Bell Telephone Co., inviting the members of of the Southern Cotton Spinners' Association to use—free

of charge—the lines of these companies. Moved and seconded vote of thanks be tendered. Adopted.

Adjourned until 2:30 P. M.

Called to order at 2:30 P. M., May 10th, 1900, by President McAden.

R. B. Miller moved that reading of minutes of last convention be dispensed with as there was considerable business of importance to be attended to. Seconded—R. S. Reinhardt. Adopted.

Secretary Hiss—Mr. President, we have names here of several gentlemen who have made application for membership and these cannot be elected without a suspension of rules.

A. C. Miller moved that rules be suspended and the applications read and elected members of the Association. Seconded—R. S. Reinhardt. Adopted.

President—The next in order of business is the reading of the report of the Secretary and Treasurer.

REPORT OF SECRETARY AND TREASURER.

Mr. President, Members of the Association, Gentlemen: —In submitting to you for your consideration report of the Secretary and Treasurer, beg to advise that it has been thought best to make a statement at this meeting of the finances of the Association, from its organization until and including the fifth day of May, 1900. You will please, therefore, bear in mind that the figures set forth in this report are not the result of twelve months' work, so far as they bear upon the finances of the Association, but cover all moneys and disbursements from the beginning of the Association. But touching simply upon the last twelve months, beg to advise that since our last annual meeting, held in this building on the 11th of May, 1899, there has been held eight meetings of our Board of Governors, held as follows: June 10th, 1899, a meeting was held in this city; August 30th, 1899, a meeting was held in this city ; Sept. 22nd, 1899, a meeting was held in the City of Philadelphia, at which meeting there were some twenty odd members of the Association gathered, including the officers and members of the Board of Governors; October 6th, 1899, a meeting was held in this city; November 2nd, 1899, a meeting was held in this city; March 7th, 1900, a meeting was held in this city; March 31st, 1900, a meeting was held in this city; May 9th, 1900, the last meeting was held in this city.

The attendance of these meetings was wonderfully good in point of numbers. In fact since the organization of this Association the attendance of the officers and Board of Governors has been almost without parallel from point of attendance.

At a meeting of this Association two years ago, there was a trifle over one hundred thousand spindles represented in the Association. At our meeting of one year ago, the Association represented about five hundred thousand spindles, and this year we have represented over two million spindles (this taking in the members elected today). Thus, can easily be seen the growth of this organization, which was organized in this city on the 15th of May, 1897, and will, therefore, not be three years old until the 15th day of May, 1900. This grand result has been brought about by the united interest taken in the work of the Association by those who have become its members, and thereby realized the great results that could be accomplished for good by supporting such an organization. The wonderful success thus far achieved is not the work of any one man or any set of men, but it is the united work and effort of every member of the Association. Therefore, every member of this Association has an equal right to feel that he is aiding

and abetting the growth of this organization and is entitled to as much credit as anyone else for the grand success attained.

During the past year, there has been prepared and issued a copy of our Constitution and By-Laws, together with a list of the officers of the Association, past and present, as well as a list of the members. Copies of this issue have been mailed to every President, Secretary and Treasurer, and superintendent of all cotton mills in the South, besides sending a copy to each member of the Association. This work was accomplished without drawing on the treasury of the Association for one cent of money; on the other hand, in view of the fact that advertisers took advantage of the offer, made to them to advertise, there was gathered into the treasury about \$116. The number of circular letters, circulars, and individual letters which have passed through the office of Secretary and Treasurer during the past twelve months, will number several thousand, and with each year's growth of the Association, this work must constantly increase. Secretary Hiss then read report of the financial condition of the Association.

TWENTIETH CENTURY PUBLICATION.

Receipts and disbursements of the Southern Cotton Spinners' Association, year ending May 5th, 1900.

RECEIPTS.

Advertising Postage Dues Active Members Dues Associate Members Banquet Fund	.06 1,050.89 831 84
	\$3,262.29
DISBURSEMENTS.	πO, J
Publishing Constitution and By-Laws	\$ 561 21
Stenographers	223.30
Postage	125.75
Traveling Expenses	48.85
Notices and Stationary	193 So
Telegrams	30.65
Rent	6.00
Exchange on Checks	4.30
General Expenses	74 01
Meeting Expenses, (Banquet May '99, etc)	550.25
Board of Governors, Item	5.00
Furniture and Fixtures	29.00
Express	3.25
Cash on Hand \$ 5.03	
Cash in Mer. & Far. Nat'l Bank 1,401.89	1,406.92

\$ 3,262.29

Charlotte, N.C. May 5th, 1900.

R. B. Miller moves that report of the Secretary and Treasurer be accepted. Seconded—R. S. Reinhardt. Adopted.

Next in order of business is the report of Committee on "Ways and Means."

Mr. R. R. Ray—Mr. President, as chairman of the committee on Ways and Means, I have no report to make.

Report of "Committee on Finance."

Mr. President—The undersigned have made an examination of the books of the Secretary and Treasurer regarding receipts and expenditures since the organization of this

Association. We have reviewed item by item the report made by the Secretary and Treasurer and find that the statements set forth by the Secretary and Treasurer are correct and accurate. We find that the books have been opened and each member properly credited with the amount of dues they have paid and taking it all together, we feel that there is no suggestion that we could make in the way of improvements so far as the bookkeeping is concerned. Respectfully submitted,

R. S. REINHARDT, Chairman.

A. P. RHYNE.

Accepted.

Reports of Special Committees. None.

Next in order is New Business.

R. B. Miller-Mr. President. From the report of the Secretray and Treasurer we learn that the Board of Governors have met here a number of times and they have defrayed all their expenses-hotel bills, etc., and I must confess that I thought that their accounts were being paid and that they were drawing on the treasury for their expenses, and it is very gratifying to me as a member this Association, that they have been so generous of their time and means. I am inclined to believe that their expenses amounted to some \$800. Now the Board of Governors are unwilling to receive any compensation for their services, -they have so reported to the Secretary and Treasurer and I, as a member of this Association, think we owe them a debt of great proportions for their good services and think that in the future the expenses of the Board of Governors should be defrayed from the treasury of this Association. Furthermore, I wish to offer a resolution that their traveling expenses shall be audited by the Secretary and Treasurer, and signed by the President and they shall draw from the treasury for their expenses in the future. I feel this is due them and make first this motion, to return thanks to them for their past services and for their liberality of hundreds of dollars which they have paid out of their own pockets. I make that first as a motion and hope it will be seconded and passed by acclamation.

J. G. Morrison—Mr. President. Inasmuch as the Secretary and Treasurer does more work than any member of the Association, I think he should receive some compensation.

R. B. Miller—Mr. President, I, of course, meant to include the Secretary and Treasurer in my motion, and I therefore make a motion to pay the Secretary and Treasurer a yearly salary for his services. Seconded by J. G. Morrison.

Secretary and Treasurer, Geo. B. Hiss—Mr. President. With all due respect to the gentleman that made the motion and to his second, I wish to say that the condition of the Association will not warrant such a step as has been proposed at present. The work was taken up by the gentlemen that started this Association without expectations of any compensation. The work has been an ardous one at times, but it has been a work—if you will allow me to say, of pleasure. I hope that the gentlemen will withdraw the motion and the matter will not be voted upon. While a candidate for another year I must advise, if the office carries with it a salary, I cannot consider it.

R. B. Miller withdraws the motion and requests that it be referred to the Board of Governors.

R. B. Miller-Mr. President, I wish to call attention to

the motion I made a few minutes ago in reference to paying the expenses of the Board of Governors. Motion seconded by J. G. Morrison. Adopted. Referred to Board of Governors.

Dr. J. H. McAden, Pres.—Next in order of business is the election of officers.

A. C. Miller—The time having arrived for the election of officers for the ensuing year, it is not necessary for me to introduce to you this gentleman whom we wish for President of this association. His name is known to all here— Dr. J. H. McAden. I thereby move that he be elected President of the Association by acclamation. Seconded— R. S. Reinhardt. Elected.

President McAden makes a short address of thanks.

A. C. Miller moves that Mr. J. P. Verdery be re-elected as Vice-President of the Association. Seconded by R. B. Miller. Elected.

Mr. R. R. Ray, moves that Mr. Geo. B. Hiss be re-elected Secretary and Treasurer. Seconded—R. S. Reinhardt. Elected.

R. S. Reinhardt nominates A. P. Rhyne, R. R. Ray and J. C. Willingham for Governors. Seconded—W. C. Hardison. Elected.

President reads telegram from Atlanta Business Men's League, Atlanta, Ga.: "Atlanta Business Men's League extends cordial invitation to the Southern Cotton Spinners' Association Convention for next year, royal welcome and good time guaranteed."

R. B. Miller moves that we return thanks for the kind invitation and the matter be referred to the Board of Governors. Seconded—R. S. Reinhardt. Adopted. Secretary reads program for meeting at Young Men's Christian Association building to-night.

Adjourned.

YOUNG MEN'S CHRISTIAN ASSOCIATION.

At 8 o'clock, P. M., President J. H. McAden introduced Mr. Geo. Otis Draper, Secretary of Draper Co., Hopedale, Mass., who made an address. Subject: "Improvement in American Cotton Machinery.

Address of Geo. Otis Draper.

A subject so comprehensive must not expect elaborate treatment in detail, within the limited time afforded to an address of this nature. Whole volumes have been written with reference to certain separate cotton machines alone, and thousands of ingenious inventions have been patented by American inventors in this line, the greater part of which might well deserve at least a passing comment. The restriction of the subject to American improvements alone, necessitates distinction by comparison with improvements not of home origin. Cotton machinery was first developed from former crude hand processes, by English genius, entire mill equipments of semi-automatic machinery having been devised and used across the water, before American inventors attempted competition. As later improvements have been largely confined to modifications of the basic ideas furnished by the early English inventors, it cannot be properly said that Americans have actually originated any one broad class of cotton mill machines. If we are allowed to go outside the mill, we shall, of course, take pride in the cotton gin, sewing machine, and the new baling machines, entirely American in character. The term "Cotton Machinery," however, is not usually interpreted as including anything not found in the cotton mill proper. We

must be willing, then, to credit the outside world with all the fundamental principles shown in the conceptions of Arkwright, Hargreaves, Paul, Kay, Cartwright, Crompton, Jacquard, Roberts, Heilman, and others, but it is undoubtedly true that the greater part of the important later modifications have been made by American inventors, especially during the last 50 years. In fact, the marvelous quickening of American inventive genius in every line of mechanics has proved to many a marked superiority for the American type of mind. As a matter of fact, however, it is somewhat questionable as to whether artificial conditions are not largely responsible for this showing. The English patent system, for instance, denies their inventors the same protection awarded by our own government, and English capitalists are more conservative in backing new enterprises. The fact that the most important of our modern textile improvements was developed from the ideas of a transplanted Englishman, Mr. James H. Northrop, and the most recent possibility by a Frenchman, Mr. Victor Belanger, shows that we must not be too sure of our superiority in mechanical evolution.

If we take the various departments of the mill in turn, we enter at the picker room, to find that American invention has been shown in recent improvements on automatic feeding machinery, and the automatic eveners used on pickers and lappers, are understood to have been of American origin.

Passing to the card room, we must acknowledge that America has made but slight change in the machinery here included, for English cards, drawing frames, and slubbers, are still imported, showing that no American inventions are sufficiently important to absolutely guide the purchaser toward the American product. The English revolving-flat card has driven out the older American type with the Woodman and Wellman stripper, also the ingenious underflat card of Foss and Pevey. While revolving-flat cards are

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built by many American builders, their general features are palpable copies of original English construction. That purely American idea, the railway head, with the evener of Hayden, has also been largely replaced by the English coiler system. Drawing frames are also English in design, although the change to metallic fluted rolls on these machines and roving frames as well, is due the American invention of Dunham and McKemmie. While American roving machinery is certainly equal, or superior, to that of any outside builder, the American improvements are largely in design, or modifications of a character that furnishes no basis for patent protection.

It is in the next department, namely: the spinning room, that America has not only held her own, but led the world. Leaving the English mule out of the question, we find its competitor, the ring frame, American in every detail, save the original drawing rolls of Arkwright. Here is one instance where England has come to us for knowledge, they being glad to copy our spindles, rings, separators, guide wires, travellers, and general details. The original idea of spinning with a ring and traveller, appears in the American patent of John Thorpe, in the year 1828, being contemporary with the invention of cap spinning, by Danforth, in 1829. The latter idea gained greater headway at the start, but the ring and traveler gradually came into prominence, being well established for use in spinning warp yarns by the 60's. The double spinning ring of Carroll, invented in 1864, is the oldest invention of its kind, to continue in unchanged form to the present day. This idea made no real change in principle, but won its place by cheapening the The wonderful inventions, by which the speed of the cost. spindle has been increased, due to the genius of Pearl, Sawyer, Rabbeth, Sherman, Atwood, Taft, Woodmancy, and various Drapers, have been largely responsible for the continued encroachment of this method of spinning upon the territory formerly monopolized by the mule. The

modern spindle is undoubtedly one of the most peculiar and original mechanical novelties known to science. No one has yet satisfactorily explained how a necessarily imperfect mechanical structure can attain absolute concentricity in revolution, being independent of changes in speed, and other serious variations in uniformity of affecting conditions. Pearl reduced size and weight, to lessen vibration, Sawyer provided a steadying upper bearing within the load, Rabbeth discovered the vital principle of a yielding bolster, Atwood made the whole structure yield, to meet the peculiar conditions of silk spinning; Sherman, Taft, and Woodmancy made important changes in design, and the various Drapers, and inventors under their charge, have perfected many important details. The speed of the old spinning frame was absolutely limited by the jar of the spindle above 6,000 turns per minute, while with the modern structure I have seen a spindle turn at 40,000 turns per minute, with absolute perfection, which is, of course, much higher than we now ever expect that the rest of the frame can run. The change of speed from the common type to the Rabbeth type, not only increased production, but it attained this gain without proportionate increase of labor cost, power, or wear. The saving to the world by these inventions, has been figured as worth \$50,000,000.00 in benefit to this country alone, and it has also been figured that the modern high speed spindle enables one operative to equal the product of 10,000, or more, spinsters, using the olden spinning wheels of the type well known within the lives of many here present. It hardly seems possible to realize that the inventions of one century have lessened human labor in one line at the ratio of 10,000 to 1; but the facts are actually understated in this extraordinary assertion.

The increase of the speed involved a necessity for separating appliances between the spindles, the earlier trade type being invented by Doyle, and those now being

introduced, by Chandler, Rhoades, and Owen. Within the last 12 months, certain startling experiments with revolving rings are known to have been carried on, which point to great gains in speed by overcoming the former difficulty with the wearing out of travellers, and the breaking down of ends, if present limits were stretched. This line of invention was started by a man who had never seen a spinning frame before his first attempt at its improvement, namely : the Mr. Belanger, before mentioned, who became interested in the problem after certain discussions arising from consideration of other mechanical devices, about which I had advised with him. While every great change demands a certain length of time in which to master details of construction, etc., I have great confidence that we shall soon see practical application of his ideas. Like the high speed spindle, this new ring idea involves another new principle in mechanics, it being found that a ring, allowed proper freedom of movement, can be revolved by its traveller at enormous speed, without frictional contact in its surrounding casing. It is theorized that a current of air is induced, which may prevent friction. It certainly prevents heat. This idea, like that of the spindle, transfers the limit of speed to some other part of the frame, and no one can prophesy where the end shall be found. The difficulty of piecing up ends, at high speed, has already been anticipated by the invention of a roving clamp, to hold the end of roving from delivery, if the yarn is broken. While more than a dozen devices of this nature are known in the state of the art, the most practical construction, to my mind, is embodied in a recent idea devised by Northrop, the loom expert.

The spinning frame has practically ended the use of the mule on warp yarns, in this country at least. It has also more than held its own, in recent years, particularly, in the field of filling yarn. This change is largely due to the persistent efforts of the late George Draper, whose vigorous crusade encountered a most discouraging conservatism and prejudice. While the modern filling frame owes little to any special invention not formerly used on warp spinning, it is undoubtedly by the persistent trial of certain inventions, that the fact of success was practically demonstrated. Twisters, also, have been benefited from the inventions made originally for the warp frame, as they use similar spindles, rings, and travellers. The simplest and most efficient twister stop motion was designed by Mr. T. H. Smith, an American mill manager.

Coming to the spooler, we also find certain of the spindle inventions employed, also the American bobbin holder of Wade, the guide developed by Laflin, Northrop, and others, and certain modern novelties in knot tyers, spool lifters steel construction, etc. I have recently seen a new design of belt spooler, adapted for the recent Clark bobbin holder, which drops an empty bobbin automatically to the belt, without necessity for the operative to remove the same by hand. I have also seen very promising experiments with a machine in which the spools are revolved by pressure against a travelling belt, which secures uniform surface speed, and therefore a higher average speed, enabling less spindles to be used, with less space to be covered by the operative, and less floor space consumed.

In warpers, we have the stop motions of Walmsly, and others, the cone drive of Hicks, the beam doffer of Rhoades, and many important modifications for different uses, by Clark, Entwistle, Straw, Walcott, Denn, and others. Colored yarn demands extra processes, in which the chain dyeing system of Straw, as modified from the ideas of Gildard and Scrimgeour, has met with unvaried success. For colored filling yarn, the chain quilling machines, devised by Straw and Pratt, respectively, have gone into extended use. Yarn used for hosiery and other similar purposes, is now wound in cones or cylinders, on machinery of American origin, including ideas of Wardwell, Foster, and others. We thus find that the entire manufacture of yarn, from the roving to the cloth, has profited greatly by the attention of American minds.

Passing by the slasher, a purely English machine, we now come to the weave room, which, like the spinning room, can fairly claim to include nearly all its modern innovations under American ownership. The cotton power loom, of English origin, received its first change at American hands, by introduction of the self-acting temple, by Ira Draper, who made his first invention in this class in 1816. From this idea started a business which has grown into the present Draper Company. Before the development of this device, cloth was held stretched after being formed in front of the reed, by clamps, which had to be continually moved forward by the operative. The self-acting temple immediately allowed the weaver to turn two looms, instead of one, thus making a gain equal at the time, in proportionate result, to the present gain of the Northrop loom. This temple was later improved by George Draper, by a form which is still largely used to-day, and still later by Warren W. Dutcher, who supplied the reciprocating feature, and also developed a remarkable system of automatic machinery for producing the parts. The filling stop motion is another important improvement claimed for America, although it is only fair to say that the English dispute this point. The first parallel picker motion was invented by the same Dutcher whose name appears on all our modern temples. The first automatic let-off was devised by Erastus B. Bigelow, the well known inventor of the first carpet looms. It was modified later by Bartlett, in the form now used by nearly every American loom builder. Other types of American let-off inventions are shown in patents to Shepard, Cottrell, George Draper, Thompson, Morton, and others. General Draper has recently effected a combination of principles, aided by another well known inventor, Mr. Charles F. Roper, which seems to make this class of device absolutely uniform

in operation, from the full to the empty beam, never needing the slightest change in adjustment. Apart from these special features, however, the cotton loom, as a whole, has received no vital change in principle for several generations. In fact, many of us know of looms built over 30 years ago, which are still running in various mills, turning out a fair rate of product. In the line of fancy looms, however, there has been continual advancement, due to the inventions of Crompton, Knowles, Wyman, Hutchins, Stafford, and others. I do not pretend an intimate knowledge of this special class, and cannot, therefore, attempt to specify in detail in regard to the various ideas developed. It is perhaps sufficient to say that foreign loom builders have recognized the novelty of American ideas in these lines, by paying large royalties to their owners.

Returning to the common loom, it will, of course, be expected that I shall refer to the Northrop improvements, which have, of late, met with such remarkable success. In the limited time at my disposal I can hardly do the subject sufficient justice, and refer those interested in the details to a 100 page book which I have recently compiled, copies of which will be supplied on demand to those interested. These important novelties, which have led to a sale of more than 60,000 looms since 1895, cover the first successful use of an automatic filling changer, the first successful use of a warp stop motion adaptable for general cotton weaving, and the first successful device for matching the pick, and making absolutely perfect cloth. The filling changer has more than halved the weaver's labor, the warp stop motion has protected the cloth from warp faults, and the mis-pick device prevents faults in the filling on such goods as demand that grade of perfection. To illustrate the futility of attempting definite explanation, it is only necessary to state that there are over 200 patents already granted to our own inventors, to cover the detail of these combinations. Broadly speaking, the filling changer is an apparatus for supplying cops

or bobbins of filling yarn to the running shuttle in a loom, whenever necessary, to keep the operation of weaving continuous. The warp stop motion definitely prevents the weaving of cloth after any one warp end has broken, and the mis-pick arrangement, in its perfected form, supplies new filling to the shuttle just before the former supply is exhausted, so that no short end or empty shed shall be shown in the cloth. Since the introduction of these special changes, many other radical improvements in loom construction have been introduced by the builders of the Northrop looms. Such include the high roll take-up, which engages the cloth practically as soon as it is woven, to prevent shrinkage or wrinkling, and which allows the winding of a larger roll of cloth than usual, underneath. Also the change in construction, by which looms can be built all of one hand, instead of in rights and lefts, as formerly. One of the latest warp stop ideas does away with the former necessity for lease rods, but placing the detectors in a proper position to do the leasing themselves. Other loom builders have also brought out interesting recent features, such as the new Wyman shedding motion, of which we use a modification, known as the Lacey form. Also a certain novel combination of picking and shuttle box devices, invented by Charles F. Perham, have enabled experimental looms to vary remarkably in speed, without banging off. There are also many recent attempts to revive the often abandoned principle of shuttle changing, on which we ourselves wasted much earlier energy. Of course, no inventions that have not been tested by continuous running under practical mill conditions, in large quantities, can be deemed sufficiently advanced for the practical mill man to take interest in them.

To illustrate the process by which inventions are developed, I will refer briefly to the progress of the Northrop loom, as an example. Our former firm of George Draper & Sons, having brought the high speed spindle to a point where further attention to detail seemed unnecessary, planned a new field of effort by selecting the loom as an example of cotton machine still requiring many hand operations, and set an inventor definitely at work in the field of automatic shuttle changers. This was on Dec. 10, 1898. Dozens of inventors, mainly in English localities, had reached the point of patenting similar devices, but all former attempts were unsuccessful, if judged by the test of practical use. Our attempt was noticed by Mr. James H. Northrop, a man who had formerly been employed by us as an inventor, but who left our works to engage in farming, for a several years' relaxation, returning to employment as a member of our tool-room force. He began to give his evening thought to solution of the same problem, and after having made a few crude home experiments, approached me with the startling proposition that if given a chance, he could apply a shuttle changer within a week, that could be made in quantities for the cost of a dollar each. By invitation I visited his farm, to inspect a wooden model which was on exhibition in his hen house, and was sufficiently impressed to secure permission from the firm to get a loom, and see The anticipated weekly period lengthwhat he could do. ened into several months, but a very fairly acting mechanism, (hardly within the \$1.00 class, however) was ready in July, 1889. Experiments were continued with this first device at the Seaconnet Mills, at Fall River, on several small lots of looms. During this trial, Northrop had the inspiration of changing the filling within the shuttle itself, and threading the shuttle automatically, by the movement This started so favorably that the shuttle of the loom. changing principle was dropped, and Seaconnet looms were changed over to adopt this new idea. The history of the next six years of experiment, outlines a record of patient perseverance, and undying faith, fit to parallel with many a more widely heralded endeavor. At no time within that period could success be definitely guaranteed, and the expense incurred was way beyond the limits usually allowed

in such ventures. Mr. Northrop worked over his machine days, nights, and Sundays, and General Draper and I, who had charge of the campaign, lived in his experiment room for a good part of our working time. Other Hopedale inventive talent was also brought to bear on the various problems, with the result that looms were actually sold and running in a mill, by the spring of 1895. (For convenient reference, and use in possible litigation, I have prepared a printed record of these experiments, which, for the period mentioned, includes over 1,000 pages of large sized volumes, to properly note down the detail of the evolution.) Apart from the outside trials at the Seaconnet and Pacific Mills, we equipped and ran a weave room of 80 looms, in our own works, for over a year, giving a public exhibition of the advantages of the new system, before accepting orders. Even then, the conditions that might defeat our ends, when attempting to start looms in mills. were necessarily more or less problematical. We had sufficient faith, however, to accept orders for several thousand looms, before we had run any of the recent model in an outside mill, increase our plant, and risk, as has been conservatively figured, over one million dollars in the entire venture, before we were sure of success. Even with the splendid records made by these earlier sales of looms, we were by no means relieved from further anxiety. Different uses required different styles, different weights, different modifications, and different attachments. Continual improvements in detail caused us to make extensive changes in the loom construction, making hundreds of expensive patterns, and special jigs, etc., worth-After the first rush, orders came in more slowly, and less. as it was necessary to employ large forces of extra draftsmen, pattern makers, inventors, and experts, the expenses, on the whole, nearly over balanced the profits. It was certainly somewhat disconcerting to find that, after laboring for several years to develop a new machine, returns figured less, in the first few years of introduction, than if

we had simply used our tools to make some standard trade machine, taking the regular trade profit. The tide, however, commenced to turn last year, and success came so suddenly that it has even proved embarrassing. We have been forced by excess of orders, to provide for the employment of at least 2,000 extra men, to be employed on looms alone; and even then, the end may not be reached.

Such is the record of the development of one American cotton machine improvement, and it could be paralleled in modified detail by many another instance. It must not be forgotten that a complete machine of this nature involves the combination of dozens of separate inventions, each of which, like links in a chain, must do their part satisfactorily. In the development of each separate device, the failures mount up to incredible figures, we having in our museum 180 separate models of the shuttle, alone. Not only must the machine itself be brought to practical perfection, but the protection of each new idea by proper patents, demands an almost equal attention to detail. The success of a competitive machine stimulates keen competition from many others with inventive talents, who look upon a patent as a challenge to their power of evasion or substitution. It often happens that the profits of an introducer on the one hand, are more than balanced by the losses of the unsuccessful promoters, on the other hand, and courts of law usually claim a certain share of capital from either. While the American patent system has, as before stated, been of great value in protecting our inventors, it by no means affords an absolute guarantee of monopoly. The fact that patents may sometimes be evaded, actually stimulates a wider range of inventive effort. To illustrate the extent of which this faculty may be cultivated, it is only necessary to say that the Sawyer Spindle Company alone has owned about 500 patents which ring the changes on a small piece of mechanism, weighing hardly a pound, and composed of but four or five primal elements. Speaking as a manufacturer, I can affirm

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that without the protection of patents, such as it is, it would be folly to invent improvements in a trade machine; for the expense of the necessary experimenting and changes, would be a burden easily escaped by a competitor who simply copied the result. It certainly would be easier and simpler to stick to old patterns, if improvements were simply a form of altruism.

The general subject of improvements, brings up a question which has never yet been definitely settled, namely: how much credit is due the inventor, how much to the practical designer, and how much to the introducer. The inventor is usually the only one that receives any public attention, as his name associates with the idea, no matter how much it may have been modified by others. The practical minds that guide the inventor's talent, or lick his crude idea into shape, remain unknown to fame; while the business ability that forces use of the new idea, is not usually considered as adding anything of great value to the combination. Of course many an inventor works his idea into pratical shape himself, and some even continue their association by introducing their novelty, by their own efforts. The general run of such men, however, usually depend more or less upon the assistance of a designer and business associate. Should we judge of the three by commercial standards, it will be found that the introducer generally takes the larger share of the profits, which would seem to prove that talent in this department was rarer than in the other two lines. For instance, in cotton machinery there are hundreds of inventors to each machine builder, and few builders that care to handle their products. As some of the most wonderful ideas in mechanics have come to men by a flash of intuition, it seems perhaps unfair to credit them too highly, as against the years of toil devoted to the perfection of the new principle, or the nerve that risks largely in attempting to make the public appreciate the benefit that may be derived from it. The Whitney

cotton gin, even after its first development and introduction, only had a product of 70 pounds of cotton per day. Α modern gin often runs through over 4,000 pounds per day. How many can name the men whose efforts have thus multiplied this original capacity? The original spinning ring and traveller was merely thought of as patent office freak for years, before it gradually met with appreciation. Cartwright showed a warp-stop motion in his patent of 1786; and yet an English writer in 1895, referred to such devices as representing a still unsolved problem. To-day we have 10,000 warp-stop motions running in one mill alone. Many excellent ideas appear before their time; others lack the practical element, which remains to be furnished by a less creative, but more experienced mind. Certain others are simply the logical results of conditions forced by other innovations. The separator would have been useless before the advent of the high speed spindle, likewise the revolving ring.

There are many curious facts connected with the history of cotton machinery improvements, which, of course, only fall within the knowledge of those behind the scenes. One of the most ingenious devices of the kind, was kept hidden for years, (not by my company, however) waiting for certain patents to expire. Certain clever ideas, of possible practical value, have often been shelved, because their use would upset trade conditions, and disturb uniformity of product. Many a good *little* idea is not taken up, because the trouble of introduction cannot be repaid by the possible profits. Many a good *big* idea, suffers by reason of its demand on large sources of capital, by which to develop and introduce it

The subject of cotton machinery improvements cannot be considered as complete, without some reference to certain difficulties with which the introducer of such improvements has to deal. Labor-saving machinery always meets with a more or less stubborn resistance by a narrow-minded class

of help, and expensive changes are often less openly, but still as persistently opposed by the ultra conservative mill Those, therefore, who thus endeavor to aid the owner. world to progress, instead of being received with open arms, as it were, more often have the door shut in their face. Not that they should be unduly admired for their generous impulses, as, like other humanity, they are not afraid of a profit; but careful consideration of their more reasonable assertions is always wise. In the early history of cotton manufacture, in England, mobs actually broke into mills, and destroyed new machinery. Even more recently, a public parade was held, in which the model of a slasher, then a novel machine, was carried through the streets, to be buried with certain formal obsequies. In this country antagonism to new ideas has been less open in character, but still formidable enough at times to make the process of introduction quite a serious hazard. I am pleased, however, to relate that such exhibitions of prejudice have not been manifested by this immediate section of our country, the South having shown a readiness to adopt improvements, that encourages our trust in human nature. I find it recorded in the New England Cotton Manufacturers' records, that in Nov. 1881, my grandfather, George Draper, made a very similar statement in the following words: "I want to bear testimony to this fact, that all those Southern people connected with manufacturing, are terribly in earnest. They are bound to learn everything that they can about manufacturing, or anything that they undertake. They seem like new converts, so to speak." An address on the subject of improvements, therefore, seems rather out of place in this present environment, for Southern manufacturers have already made themselves fully acquainted with all the modern improvements known to the manufacturing world. More new and improved cotton machinery is shipped South to-day, than is required by Northern demands, and the general proportion of mill equipment in this section, is cer-

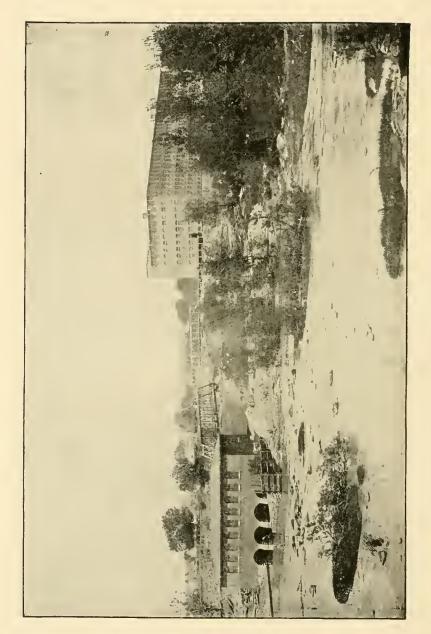
tainly more up-to-date than in the older Northern mills. Certain economists of high standing, have figured that the principal advantage which has produced the rapid growth of the Southern cotton mill industry, is principally to be found in this use of newer processes; and it certainly is not for me to dispute any such contention. No improvement can be forced on intelligent men, unless its use *is* profitable. Many, however, let their chances go by, waiting, in the hope of enhancing that profit. Men still postpone their trip to Europe, hoping that a bridge will be built within their time.

We are all working toward one definite end, namely: to cheapen and better the production of American cotton goods, and make our exports of cotton in rolls of cloth, rather than in bales of fibre. This present gathering proves that mill men are willing to let each other profit by all sources of general knowledge, and the man with the machine stands ready to unite his mechanical skill with your business ability, in a common onslaught on cost of production. The way to improve, is to use improved methods.

President McAden introduced Mr. Sidney H. Paine, electrical engineer, Boston, Mass. Address—" The Development of Electric Driving." (Illustrated with stereoptican views which are reproduced here, through the courtesy of General Electric Co.)

ADDRESS OF MR. SIDNEY H. PAINE.

To a Southern manufacturer belongs the honor of having been the first to adopt the subdivided system of electric driving now in most general use. I use the word "honor" advisedly, for had Mr. C. K. Oliver, of Columbia, been a man of less courage, had he been content to merely follow in the paths marked out by his predecessors, the growth and development of the system would have been



Columbia Mills, Columbia, S. C.

greatly retarded, and it could not have occupied the position which it does to-day. Mr. Oliver, however, was imbued with the spirit of the age, which is pre-eminently a spirit of progress.

The standards of yesterday are not necessarily considered the standards for to-day. Scientific inventions, if shown to be of practical value, are immediately adopted. This has been especially true in the department of electricity. The telephone is of comparatively recent origin, yet it has already become a necessity; it would now be



An Inverted Induction Motor.

impossible to carry on business without its assistance. There is in this country hardly a town of 5,000 inhabitants whose streets are not illuminated, in part at least, by the arc lamp, yet at the Centennial Exposition in 1876 it was shown as a laboratory experiment. A little over twenty years ago Edison suggested the possibility of subdividing the electric current by using incandescent lamps. Now over 100,000 lamps are manufactured *daily* in the various lamp factories of the United States alone. The first successful attempt to solve the problem of transporta-

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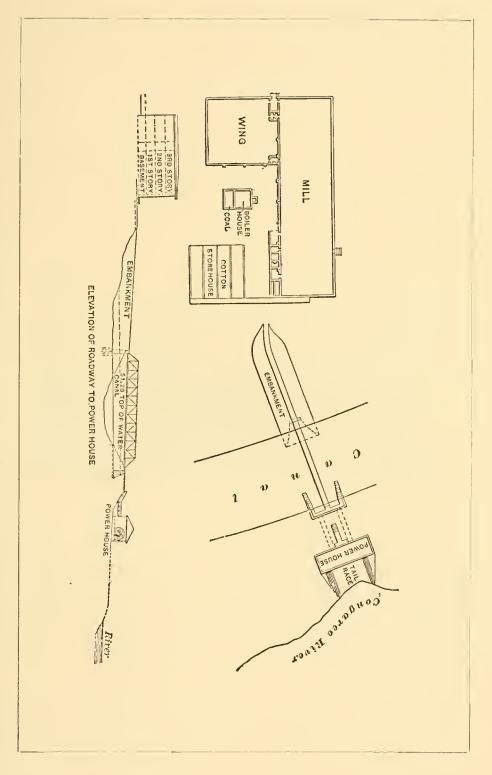
tion of passengers by the electric street railway was made about fourteen years ago. To-day 95 per cent. of the mileage on street railroads in this country is operated by electric motors, and it is now no longer a question as to which system shall be adopted. It is universally conceded that the electric railroad system, although more expensive in first cost, yields far greater returns and affords much more satisfactory means of transportation than the old horse car.

A year ago, at the meeting of the New England Cotton Manufacturers' Association, I stated that there were about 13,000 H. P. of electric motors in use in textile mills. Within the past year this use has increased to such an extent that to-day there are nearly 30,000 H. P. of motors in operation in textile mills, or under contract. Adopted at the Columbia Mills as furnishing the most feasible solution of a very difficult problem, the electric drive has steadily risen in the estimation of manufacturers, until it bids fair to supplant the best mechanical methods. It is the purpose of this paper to rapidly sketch the growth of this application of electricity and to briefly mention some of the plants where special features are found. Similar cases will be grouped together, although installed at different periods.

The early applications of this system were made for the purpose of supplementing existing powers. They at first were confined entirely to conveying the power from underloaded, or otherwise unused, water wheels.

The Ponemah Mills, of Taftville, Conn., was the first textile manufacturing company to use the electric system on a considerable scale. The shortage of power at Taftville suggested the possibility of utilizing a finely developed water power at Baltic, 4½ miles away. The plant was started in January, 1894, and consists of two 350 H. P., three-phase, alternating current generators at Baltic and two similar machines at Taftville. The latter are used as synchronous motors and deliver power to the

Plan and Profile of Columbia Mills.



two main line shafts in the basement. This plant has been in successful operation, without interruption, for more than six years. A similar plant was installed at the Boston Duck Company, Bondsville, Mass. About half a mile below the mill an unused, and but partially developed, water power afforded an opportunity of dispensing with two steam engines at the mill. This plant was installed in 1896, and consists of one 600 H. P. generator and a similar machine used as a synchronous motor. This plant has operated so successfully that the saving in fuel, obtained by discontinuing the use of the engines, has repaid the investment in the electrical apparatus.



Dam and Power House, Pelzer Mfg. Co.

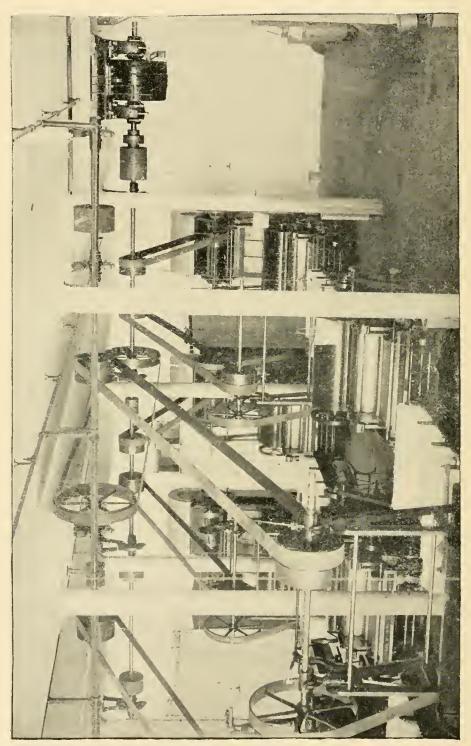
The next step in the development of the electric drive was at the Columbia Mills, at Columbia, S. C. A canal had been built originally to permit boats to pass around the rapids in the Congaree River. This use of the canal had long been discontinued, and only a portion within the city limits had been kept in repair. The canal was between the river and the mill site, and either a very costly tail race would have to be built under the canal, or else the mill would have to be driven by a long and expensive rope drive. The electric system was brought to the attention of the engineers, Lockwood, Greene & Co. Previous to that time this system was practically untried for this purpose, as the Ponemah Mills had not yet been started. Realizing this, the engineers and owners of the mill finally decided to place their sole dependence upon what was then but a theory. The results obtained, during the six years this mill has been in operation, have entirely justified their judgment. This is the first textile mill in the world to rely entirely upon motors driven by generators upon the premises, and also the first textile mill to adopt the subdivided system of driving. This system is now used almost universally in all new mills where the electric drive is adopted.



Mill No. 4, Pelzer Mfg. Co.

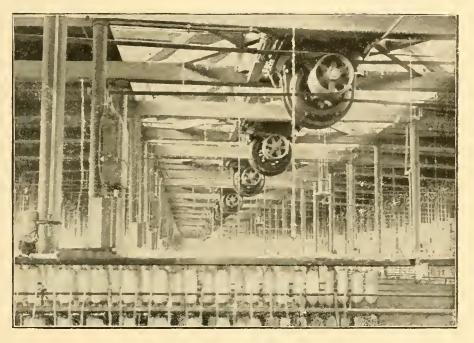
The success at Columbia led to the next step in the development of the electric system. The Pelzer Manufacturing Co., of Pelzer, S. C., decided to erect their No. 4 mill. No water power was available within nearly three miles. A dam and power house were erected at this point, and the new mill was erected near the mill village. Over 3,000 H. P. is carried electrically from the dam to the mills. Many new and unexpected problems were encountered and solved, and to-day the mill is operating as successfully as any of the later installations.

The success of the Columbia Mills further induced the Columbia Water Power Company (owners of the canal



Picker Room of the Columbia Mills.

supplying water to the Columbia Mills power house) to erect a large power house of their own, capable of ultimately accommodating eight generators, each of 1,000 H. P. and direct connected to water wheels. Three generators have been installed. From these are driven the Granby Mills, 1½ miles or more away, and using over 1,800 H. P. in motors. The Palmetto Mills have also been equipped with 200 H. P. in motors, which receive their current from the Columbia Water Power Company's generators.



Spinning Room, Pelzer Mfg. Co.

In numerous older plants, the distance between the prime mover and the machinery to be driven was too great to permit the use of mechanical methods, and in some cases, as at Columbia, for other reasons the mechanical method was impracticable. The results obtained at Columbia and Pelzer fully established the electric drive as a successful competitor with its older rival, and proved its value even on distances within reach of the mechanical system. In quick succession plants were installed by the Hadley Thread Co., Holyoke, Mass.; the Jackson Co., Nashua, N. H.; the Amoskeag Co., Manchester, N. H.; the Washington Mills, Lawrence, Mass.; the Wamsutta Mills, New Bedford, Mass., and at other places. In all these, mechanical systems were displaced and great benefits derived.

The Anderson Cotton Mills, of Anderson, S. C, through their engineer, Mr. C. R. Makepeace, were the leaders in the adoption of the next step in the development of this system. It was decided to drive the spinning room in their new mill by means of small motors, each motor being placed between two spinning frames and direct connected



Power House, Columbia Water Power Co.

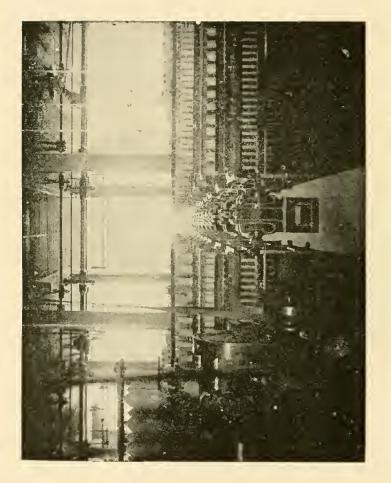
on either side to the frame by means of a friction clutch. This dispensed entirely with the use of all belting for driving the spinning room. The current is received from the Anderson Electric Light Company's station at Portmann Shoals, ten miles distant. *Between the water wheel* and the spinning frame there is not a single belt or auxiliary shaft. The increase in quality and production obtained by the omission of belting has been very marked over mechanically driven frames. I have made many tests on this latter system, and find that there is a very large loss in speed on the frames, due to the slipping of the

various belts between the engine or wheel and the frame. This is not dependent upon the speed of engine or wheel. In one case reported to the New England Association last year, I found that the speed on the front rolls in one room varied from 103 to 120 revolutions. A direct connected motor installed on one of the frames in this room showed a range in speed, during a week's run, of from 120 to 122 revolutions on the front roll. The generator supplying current to this motor was operated by the same engine which drove the other frames. The belts on all the frames in the room operating mechanically, were taken up and



Granby Mills.

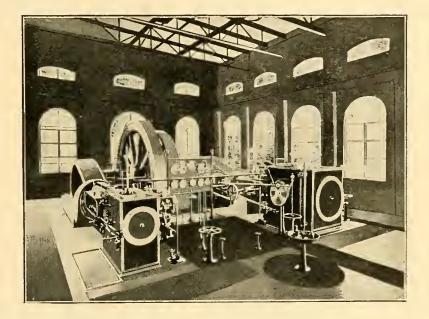
the speed rose from 103 as a minimum to 113. This showed the loss of speed due to slipping of the belt. The difference between the 113 revolutions and 120 revolutions was accounted for by the fact that it is impracticable to make the various pulleys the exact diameter required, and is also due to a small extent to the fact that as the belts stretch they become thinner, so that the belt speed is reduced. In another mill where the manufacturer claimed that he did not lose 1 per cent. in speed, he admitted to



Spinning Room, Anderson Cotton Mills.

me after a test that he found a variation of at least 9 per cent. on his frames. In still another mill I found a variation of over 15 per cent. between the various frames in the same room. all of which were supposed to run at the same speed. By the use of the electric system it is possible to maintain the speed much more nearly at the theoretical maximum than on the mechanical system. The experience at Anderson has been very satisfactory.

Within the last two years, however, the greatest advance has been made in the use of the electric system. I have

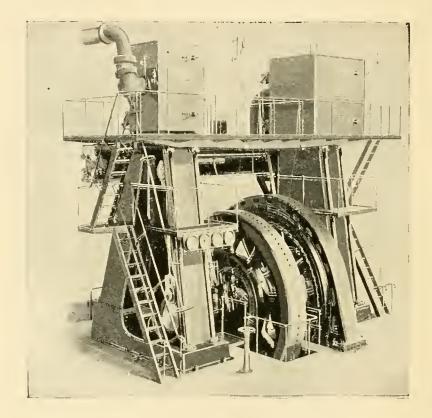


Engine Room, Lancaster Mills.

stated that, heretofore, the motive power was obtained mainly from water wheels. The Metropolitan Water Board, of Boston and vicinity, condemned the water power on the Nashua River, at Clinton, as it was necessary to draw upon this source for supplying the city of Boston and suburban towns with water. After a long controversy, damages were paid to the Lancaster Mills for the water power which was taken by the Metropolitan Water Board. The engineer of the mill, Mr. Stephen Greene, had had experience with the electric drive at Columbia and Pelzer,

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and his attention was turned to that system as the best method of driving the mills. Only a few years ago the mechanical system would have been perpetuated in this mill. Mr. Greene, however, after careful study of the problem, recommended to the owners that their large new engine, which was to take the place of the water wheels, should be placed at some distance from the mill, and that it should drive the mill through the medium of generators



Generating Set of the American Woolen Co.

and motors. This suggestion was finally adopted by the owners of the mill. Aside from the generating plant, the system adopted in the Lancaster Mills is very similar to that in use at Columbia, Pelzer and all the other large installations. A year later, the agent of the mill, Mr. Charles H. Richardson, found it desirable to displace the old engines which had been retained. So successful had been the results with the electric drive, in point of production and reliability, that a second engine of 2,200 H. P. was contracted for, which is to be direct connected to a generator, and additional motors are now being placed in the mill. When this plant is completed, it will aggregate nearly 4,000 H. P., and the electric system will be used throughout the mill.

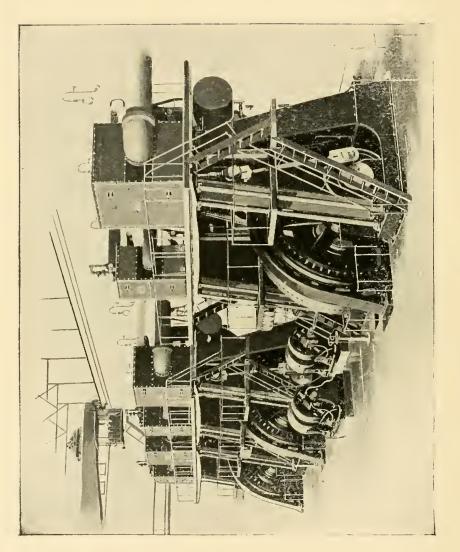
The accompanying illustration shows the 2,700 H. P. generator and engine which will be used in the plant just contracted for by the American Woolen Company, for the Washington Mills at Lawrence, Mass.

Referring again to the Granby Mills, of Columbia, a careful log was kept in this mill for two years, and com-



Olympia Mills.

parison was made with a similar log kept at the Richland Mills, also in Columbia. The former is driven by motors receiving their current from the generators in the Columbia Water Power Company's power house. The latter mill is driven by an engine. These two mills were built and operated by Mr. W. B. Smith Whaley, who became very much interested in the electric drive as a result of this comparison. So much was the result in favor of the electric system that when Mr. Whaley designed the Olympia Mills, now being erected in Columbia, he decided to drive it throughout by motors. Three generators, each of 1,700 H. P. capacity, will be direct connected to vertical cross compound engines. These generators will not only



Generator Sets of the Olympia Mills,

supply power to the mill through the subdivided motor drive, but will also supply current to operate the street railway and the lighting system in the city of Columbia. Current will also be supplied to operate the Capital City Mills, now being erected in that city. The Olympia Mills is unique in several respects. When completed, it will be the largest single mill (measured in spindle capacity) in this country. Other corporations have more spindles, but their present capacity is the result of additions to the original plant by means of extending the older buildings or the erection of new buildings. The Olympia Mills is the first mill in the country to be especially designed and built for the use of the electric system, where the generators are to be driven by steam engines.

The following list shows this latest step in the development of the electric system. All of these generators will be driven by steam engines, to which they are direct connected. Five of the leading mill engineers of the country are represented in this list. Those marked with a star are new mills now in process of erection :

	Gen.	H.P.	Rev.
Lancaster Mills, Clinton, Mass	I	1,600	75
Lancaster Mills, Clinton, Mass	I	2,200	70.5
*Olympia Mills, Columbia, S. C	3 each	1,700	133
*Buffalo Cotton Mills, Union, S. C	I	1,700	133
*Ludlow Mfg. Co., Ludlow, Mass	1	1,000	I20
American Thread Co., Holyoke, Mass	I	800	150
American Woolen Co., Lawrence, Mass	I	2,700	I 20
*DeKalb Cotton Mills, Camden, S. C	I	600	150
*Seneca Cotton Mills, Seneca, S. C	I	600	150

It is interesting to note the higher speeds which have been adopted on the later engines.

I will not go further into a description of these plants; sufficient has been said to show the large extent and the variety of uses to which the system has been applied. I would now call your attention to some of the reasons which have led manufacturers to adopt the electric drive, operated by steam engines, in these new mills.

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THE ELECTRIC SYSTEM DOES NOT INCREASE THE ORIG-INAL INVESTMENT BY THE AMOUNT OF MONEY PAID FOR THE ELECTRICAL EOUIPMENT. In many items the first cost is greatly reduced. With the electric drive no belt or rope tower is required. The large main drive is omitted and the shafting is much smaller. Being subdivided into short sections, the shafting may be operated, if desired, at higher speeds, and smaller driving pulleys may be used. This will result in shorter hangers. Subdivision is obtained without the use of friction clutches as on the Ordinarily no separate lighting mechanical system. dynamo is required, the current for the electric lights being generally taken from the same generators which supply current to the motors. In a large mill these savings will go very far towards paying the first cost of the electric system.

As compared with a small mechanically driven mill, where provision is made for subsequent enlargement by extension of the main building, there are many other savings in addition to the above. In such buildings the belt tower must be wide enough for the original building and also the extension. The driving wheel on the engine must have sufficient face for the larger mill. One side of a cross compound engine is sometimes installed at first, the other cylinder being added when the enlargement is made. For the sake of higher economy, as an alternative, half of a double tandem compound engine might be used. The alternative is, however, seldom adopted. The first plan is open to the objection of large fuel consumption, especially as the date of the enlargement is indefinite. Both plans provide a single crank engine, which is objectionable and uneconomical. Still another plan is to install the permanent engine complete at the start and operate under reduced steam pressure. No matter which of these plans is followed, the extent of the enlargement, as well as the character of goods to be manufactured therein, must be deter*mined in advance.* If the mill is designed for fine goods, it cannot go on to coarse numbers and enlarge to the extent originally contemplated. The same limitations apply to the main shafting, which must be made sufficiently large to carry the subsequent addition as well as the present mill. It may be years before the extension is made, yet the burden of the first cost and uneconomical operation must be borne by the first mill. More than that, it may be found that after all the provisions made for enlargement are inadequate.

How much more simple and reasonable is the solution of this problem in an electrically driven mill. Extend the building and add a second engine and generator with its complement of motors. *The extent of the addition and the character of the goods to be manufactured need not be considered until the time when such addition is necessary.* Furthermore the first cost of the electrically driven mill will probably be less than that of the mechanically driven mill in which provision for enlargement is made. The cost of the engine and its foundations, for the latter mill, will be considerably higher than that for the mill using the electric system. The shafting in the mechanically driven mill, being much larger than is necessary for the present building, will be very much more expensive than that required in the electrically driven mill.

If the small mechanically driven mill is erected with a view only to present requirements, additional capacity can only be obtained by the erection of practically independent buildings. If this is done, each department in the first mill must be duplicated in the second, and a double force of comparatively high priced labor must be employed. The first cost of the completed mill buildings would be much higher than if the original plan permitted of additions by extension.

Especially on mills where the motive power is furnished by water wheels, the cost of the mill foundations is oftentimes very much less on the electrically driven mill, as an opportunity is afforded to secure a site on firmer ground than if it were necessary to locate the mill adjacent to the power house.

IMPORTANT AS IS THE QUESTION OF FIRST COST, OF STILL MORE IMPORTANCE IS THAT OF ECONOMICAL AND FLEXIBLE OPERATION. In this respect the advantages are all on the side of the electrically driven mill, where the subdivided system is used. Briefly stated, the following are some of these advantages:

Subdivision into independent sections, each driven by its own motor.

Variations in speed in one section, due to slipping on such belting as is still retained, are not communicated to other sections.

The mill is not dependent upon one main drive. Therefore there is less liability of shut-down due to accident within the mill. If the shut-down occurs, it is only partial and local.

It permits the operation of one or more sections overtime, without driving the shafting in other sections.

There is less difficulty in keeping the shafting aligned. It therefore follows that there is a saving in labor and less power is wasted.

Steadiness and uniformity of speed. This is occasioned by omission of many belts, and results in greatly increased production, as shown above, and in less repairs on the machinery, especially on the looms.

Uniformity in size of shafting. With a properly designed subdivision of the electric drive the diameter of the shafting is determined solely by the width of the bay. All pulleys and hangers are therefore of the same bore, except on those lengths of shafting which carry the receiving pulleys. In the Olympia Mills, requiring 3,400 H. P., all the shafting measures 25% inches in diameter, excepting that on those lengths which carry the receiving pulleys, the shafting measures 3 inches.

Efficiency. On large plants the loss between the prime mover and the shafting driven by the motors will vary from 16 to 18 per cent. In other words, 82 to 84 per cent. of the power delivered by the engine or wheel will be delivered by the motors. Great claims are advanced for the mechanical system on this point. It is impracticable, however, to accurately measure the losses where that system is used, for the reason that you cannot determine the friction of the shafting while carrying its load of machinery under full production. The power lost by slipping of belts and by increased pressure on bearings cannot be ascertained; except approximately.

Improved light and ventilation are obtained by removing the power house away from mill, and by omission of the belt tower.

Power in any section may be augmented, or addition may be made to the mill without stopping the mill or interfering with the existing shafting. It not infrequently happens, especially in older mills, that it becomes necessary to replace the main engine. It is either worn out or machinery has been added to such an extent that it is overloaded. On mechanically driven mills it will in such cases be necessary to shut down the mill. This will result in the loss of profits and of fixed charges during the shutdown, and, what is quite as important, the scattering of the employees. With the elecric drive no stoppage would occur as long as the old engine could be operated. A new engine and generator would be installed at any convenient point, and either supplement the old engine or take its place entirely and also carry any additional work that may be desired.

The power required to operate any section may be readily measured. In the Olympia Mills and in the Lancaster Mills this will be continuously indicated by instruments

placed in the engine room. These indicators enable the engineer in charge to detect at a glance any unnecessary consumption of power due to poor alignment of shafting, improper oiling, etc. The actual power consumed by any machine can be measured at any time by separate portable instruments.

The generating plant may be also subdivided into two or more units. This insures against a complete shut-down in case of accident and also permits economical operation under partial loads. This also allows one or more sections of the mill chosen at will to be operated from either generating unit. All other sections will remain idle. This is not possible with the mechanical system, even though the generating plant may be subdivided.

Concentration of manufacturing buildings. As the location of these buildings is determined without reference to the location of the power house, they may be placed together and so arranged as to facilitate manufacture and reduce the expense of supervision.

NEW COUNTY COURT HOUSE.

Convention called to order at II A. M. May IIth by President J. H. McAden, who states, first in order of business is election of new members.

Pres. McAden reads a telegram from New Orleans Progressive Union: "To D. A. Tompkins, Southern Cotton Spinners' Association: We present our good wishes and hope you will select New Orleans for next Convention of the Southern Cotton Spinners' Association. Signed: A. R. Blakely, Pres., New Orleans Progressive Union."

R. B. Miller moves that we extend thanks for this and refer the matter to the Board of Governors. Seconded—R. S. Reinhardt. Adopted.

Pres. McAden—Before we enter upon the regular line of business I wish to state that the Board of Governors are now arranging the schedule of prices and same will be ready for the Convention about 6 o'clock.

R. B. Miller-Mr. President, I wish to present the name of Col. J. T. Anthony as an honorary member of this Asso-You are all familiar with the fact that Col. ciation. Anthony is heart and head in sympathy with this work, and he was our honored first President and contributed much of his time and energy to this work to make this Association the power that it is to-day. By virtue of the fact that he is no longer interested directly in manufacturing, hence he is not eligible for membership in this Association, but as a past officer, and as one who is deeply interested in this movement, I think he should be elected as honorary member of this Association and therefore I present his name to be put upon the roll as an honorary member of this Association. Seconded-A. C. Miller. Adopted.

Secretary Hiss—A special train has been provided by the Seaboard Air Line to take the members of this Association and their friends to Lincolnton, N. C., to visit the Daniel Manufacturing Co. This is open to members of the Association and their friends. The train will leave the Seaboard Air Line depot at 3 o'clock and return at 6 o'clock. Secretary also read letters from Manufacturers and North State Clubs extending courtesies to members and friends.

R. B. Miller moves that thanks be returned for all favors extended the Convention. Seconded—R. S. Reinhardt[•] Adopted.

Pres. McAden—Gentlemen, it affords me very great pleasure to introduce to you one of the very first men of this Association, Mr. D. A. Tompkins, of Charlotte, N. C[•]

Mr. Tompkins addressed the convention. Subject: "The Unification and Enlargement of American Interests."

Address of Mr. D. A. Tompkins.

The American Union, as founded by Hancock, Washington, Jefferson and other patriots, was for all practical purposes a homogeneous nation of common interests. Up to the time of the war for independence, slavery and other domestic institutions had been distributed over the whole territory, New England having in the early days of the provinces led in promoting the establishment and maintenance of the institution. I have had occasion before to point out that slavery flourished more than 100 years in New England before it was tolerated by law upon the soil of Georgia. On the other hand, in the early days of the Republic, the South was the manufacturing end of the New Nation. I have also had frequent occasion to point out that as late as 1810 the manufactured products of Virginia, the Carolinas and Georgia exceeded in quantity, value and variety those of all the New England States. In those early days the strongest advocates of the principle of protection to American Manufactures were amongst the Southern Statesmen, Mr. George Washington being one of these. Even Mr. John C. Calhoun himself, in the early part of his career, was also a protectionist.

With the development of the production of cotton, the slave became much more valuable to the Southern cotton planter than to the New England farmer. Cotton planting with slave labor became more profitable and pleasant in the South than manufacturing. As a result, the slaves of the North were sold South, and the manufacturing interests of the South moved North. The principle of protection went with the manufacturers, while that of free trade gained adherents amongst the cotton planters.

Diverging interests brought on the Civil War. This war destroyed the institution of slavery. The passions thus engendered led the victors to undertake the impossible experiment of legislating the Negro to be the equal of the white man. The experiment was forced with an intolerance that brooked no argument, with an impatience that forbade delay, with an energy that gave opportunity to unprincipled adventurers, North and South, to become vampires upon the people of the South, white and black.

It is to the eternal credit of the white people of the South that they stood for a period of 30 years against this wave of semi-anarchy and saved Anglo-Saxon civilization in Virginia and the cotton growing States from the fate which has befallen the once proud Spanish civilization in Cuba, South America and the Philippines.

In the period of about 30 years succeeding the Civil War, all questions of politics, of developing manufactures, of protection or free trade, of currency, and all other questions, save only the one of "White Rule," were held in total abeyance. Nothing was of the slightest importance but the so-called "race problem." There was no question as to refinement of government, but simply the one question of government at all. The race problem is one that is no longer confined to the South as a problem of "white rule," but has become national, under the name of "Anglo-Saxon Supremacy."

To-day, for the first time in a hundred years ,the institutions and interests of the American people are identical and common. Slavery is abolished by law, and wiped out in fact. Manufactures have again extended over the South. A condition is reached in which the interests of Connecticut and North Carolina are identical. It is hard to realize this, but it is nevertheless true.

In this new situation it béhooves us all to study the problems that confront us, and learn in what direction our common interests lie. This done, we may all co-operate to bring about such results as we may determine to be for the advantage of our Agriculture, Manufactures, and Commerce. The means that appear to me most essential for the advancement of these interests are :

- I. Education.
- 2. Transportation.
- 3. Markets.
- 4. Banking.

I will discuss these briefly in the order named.

EDUCATION.

There is a certain degree of education that comes to all people by virtue of being brought up in a civilized community. With such a very limited general education, acquired chiefly by contact, our people are able to spin and weave cotton into the simplest and plainest fabrics. These fabrics are used for the commonest purposes at home, and to sell abroad for similar use in semi-civilized countries, or to semi-civilized people who cannot even do with reasonable economy the simplest operations of spinning and weaving.

I have often shown to what extent we may increase the value of raw cotton by means of the simplest forms of its manufacture into cloth. I wish now to undertake to show how, with fuller knowledge and better skill, we may still further increase the value.

Estimating the crop of North Carolina at 500,000 bales, this as raw cotton, at 6 cents, would yield \$15,000,000; as plain white cloth, at 18 cents, it would yield \$45,000,000; as checks and plaids, at 24 cents, it would yield \$60,000,-000.

The people of the State are, as a matter of fact, now utilizing 300,000 bales, and making a product which Mr. Wm. Entwistle, of Rockingham, says will average 20 cents a pound. This would yield \$50,000,000 for three-fifths of the crop.

But these values are by no means the limit of what may be brought to the raw cotton with increased knowledge and skill.

This same cotton turned into a fancy gingham or good quality of outing cloth would bring 36 cents a pound and would yield \$90,000,000. If made into a fine dress gingham hke Toile de Nord, made by my friend Mr. A. H. Lowe, a⁺ Fitchburg, Mass., it would bring 60 cents a pound, which would yield \$150,000,000.

Taking now some French mull or some mercerized cotton stuffs, we find these bringing in the market \$1.20 a pound, which would yield \$300,000,000.

Turned into this shape, it is seen that the cotton crop of North Carolina would bring as much money as the entire crop of the South now brings when sold as cotton. These cloths are not so very fine, and it would require but a little step forward in education for our people to become qualified to make them.

But this is by no means the limit. Take some French nainsook, we find some of it selling in the stores at \$6.00 a pound. If manufactured into this stuff, the value of the North Carolina crop would go the amazing sum of \$1,500,-000,000. And yet, even this is by no means the limit. Swiss embroidery, the value of which goes to \$24.00 a pound, would make the North Carolina crop yield \$6,000,-000,000, a sum that is inconceivable beside the paltry \$15,000,000 which is the value of our raw cotton.

This exhibit and the resulting figures could even be carried farther, but what's the use? It has long since become plain to me that any State in New England or the South could well afford to issue a half million dollars in bonds to be expended in textile education, with absolute certainty that inside of ten years every dollar's worth of raw cotton could be made worth twenty dollars. Look at the tonnage of France's export. It is one of the richest countries in the world, and yet her export tonnage is very small. Her principal exports are composed of a very small proportion of raw material and a large proportion of knowledge and skill. The Frenchman has not the endurance or staying quality of the Anglo-Saxon, but if he were not quicker and better educated for work, he would starve to death.

TRANSPORTATION.

It would be useless to make goods without the means for their economic distribution. The Scientific American has lately published some comparative statistics showing that by means of railroads, the United States handles annually more than 900,000,000 tons of freight. Great Britain handles about half as much; Germany about one-quarter, France about one-eighth and Russia about one-tenth. Our domestic market is then the best market in the world. This condition is largely the result of our transportation facilities. We have more railroad mileage than that of all the rest of the world put together. We handle about as much freight as England, Germany, France and Russia all together.

How did we get this system of railroads? I answer by means of subsidies. The national government itself has extended vital aid in the construction of our transcontinental lines of railway. Amongst the States, cities, towns, counties, and even townships, those would be rare indeed that have not contributed aid to one or more railroads, either by voting bonds to be exchanged for stock, or by guaranteeing railroad bonds. There has been land grants; grants to railroads for the use of whole streets. And in every other way possible to imagine, subsidies have been given, and freely given, to railroads. It has been argued in opposition, in many instances, that the stock for the proposed issue of bonds would be worthless. The good citizen has invariably answered : "Well, if we get the railroad, I'm willing to lose the stock if necessary." I doubt if a State, city or county could be found that would be willing to take back its lost money-its subsidy moneyand give up the railroads which this money helped to build.

If a good line of railway was proposed to-day which could

be brought to any county seat in the United States for \$25,000, or failing in this subsidy, would pass six miles outside the town, the people would with absolute certainty raise the money.

Both the South and West are particularly enterprising in this matter of domestic transportation facilities. All sections of the United States are urgently in need of foreign markets. Yet lavish as our people have been in expenditures for domestic transportation facilities, if the subject of a little aid is mentioned for a steamship line to facilitate the exportation of cloth made in American mills, or cotton made in Texas, or flour from wheat made in Dakota, the North Carolinian, the Texav and the Dakotan immediately takes a fit. Republicans and Democrats alike forget the interests of the people, and consider it necessary to sacrifice all else to what they conceive to be party loyalty. Can it be party loyalty to wage a war of politics in the pursuit of office and regardless of the welfare of all the people?

We have now reached the condition where we make more manufactured products than our home markets will take. England and Germany are willing enough to send here their subsidised ships to take away our raw cotton, but not our cotton cloth; to bring us pig iron, but not to take pig iron away; to bring steel rails and band iron, but not to take articles of our make to their customers. We must find the ultimate markets for these products ourselves, and we must establish ship lines to reach them. I am in favor of whatever expenditure is necessary to create and maintain as good transportation facilities on the seas as we have on land. We have the best in the world on land, and the best home markets as a consequence. What we have on the seas is hardly worth mentioning and our foreign trade is proportionately small.

Of 64,000,000 dollars worth of cotton goods going into China, a few years ago, the United States put there 6,000,-000 dollars worth only.

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I favor an Ishmian ship canal to be built and owned by our general government. I should by preference rather see it controlled by treaties with other nations in a way to keep it freed from the vicissitudes of war. The Hay-Paunceforte treaty seems to me to be all right.

I favor a cable across the Pacific to be laid by the general government, and to be owned and operated by the government.

These are facilities that are essential to our manufacturing growth. We can no more handle export trade without transportation facilities than we can prosper at home without them, and everybody knows that a town without a railroad is dead till it gets one.

MARKETS.

For raw cotton at 6 cents a pound, England, France and Germany are as good markets as we could desire. When we needed pig iron and cotton ties, they were delighted to send these here in exchange for our cotton, using their ships for all the transportation.

But if we prosper, we must turn our cotton into cloth, and get 20 cents a pound, instead of 6 cents; and we have done it in the past. We must stop buying pig iron, and make all we need, with a surplus for export, and we are already doing this. We must seek, develop and protect markets for cotton, oil, wheat and flour, lumber and its products. What I say about all these, applies equally to New England, the North and to the South.

Indeed in all that I say at all times, I seek for the establishment of no policy for sectional advantage. I seek rather to find out and exhibit those policies which are for the best interests alike of all the people of this country and of the countries we would deal with.

If we co-operate in the development of manufactures and the fostering of surrounding conditions, there is no such thing as competition between New England and the South.

TWENTIETH CENTURY PUBLICATION.

I believe that the purchase of Louisiana by Jefferson was a wise and beneficent action. The foreboding of evil which were made as arguments against the action have not come true.

This is now the chief wheat growing area in the United States. During the Spanish War, it was from the Louisiana purchase states that we got our horses and mules. It is now one of the wonderful agricultural and stock raising areas of the world. I believe that the annexation of Texas was equally wise and beneficent, and the forebodings of evil in that case have failed also.

This annexed territory is as wonderful as the other in agriculture and stock raising,—cotton and cattle. In it is raised more than one-third the entire cotton crop of the United States.

The acquisitions of Florida from Spain, of the South Pacific territory from Mexico, of Alaska from Russia, have all been advantageous to us and to the populations that came under our control, with or without their own consent, and the greater advantage has in each case been to the people of the acquired territory. We have in each case given them law and order, and guaranteed for them the security of life, liberty and property. We have furnished them systems of education, and in infinite ways hastened them forward in the path of civilization.

The policy of our country, since its foundation, has been, above that of all other countries, one of expansion. We already have Porto Rico and Hawaii. I believe that Cuba will come to us in the natural course of events by annexation.

I favor keeping the Philippines. Considering modern facilities, the Philippines are more accessible to us now than California was when we acquired it. They are as accessible now as Alaska is now, and yet who would propose to give up Alaska? Their value in trade far surpasses that of Alaska, and our opportunity for the extension of civilization is greater there than in Alaska.

The possession of the Philippines is important to us for another reason. There are said to be 800,000,000 people in the country known as the Orient. Christian civilization is beginning to reach these people. Our churches have for years kept missionaries amongst them.

The works of these missionaries are now beginning to bring some of the results that their supporters here at home have hoped for. Can we now refuse to go ahead with the civilizing work that has begun? We will of necessity have increasing duties and interests in China. For the advantage of our people at home in their trade with China, and for the advancement of the work of our Christian missionaries, we should insist upon the preservation of our treaty rights with China, and resist the partition of that Empire. Our duty and our interests lie together in these I believe that Democrats and Republicans alike matters. ought to demand of, and support, our government in a vigorous prosecution of all measures looking to the protection and extension of our interests in what was once the old far East, and what is now our new far West.

BANKING.

In that depressed period commencing with the panic of 1893 and lasting until the outbreak of the Spanish war, it became clear to all men that our banking system was seriously defective.

Bank after bank, having ample capital and ample surplus assets, closed doors and were announced as having failed. All because of inability to utilize good assets as a basis upon which to get currency. Cash deposits in banks could not in many cases be drawn out by check, because of the scarcity of currency. It was made manifest that the serious defect of the banking system was was one of inelasticity. If some means had not been devised for the temporary introduction of an elastic feature by which currency could be raised on good assets, every bank in the country in active commercial business would have been compelled to suspend payments. This temporary device was the issue of clearing house certificates. These were in reality bank notes issued on the joint account of a number of associated banks upon selected assets deposited to secure them. The pressing necessity and the perfect safety of this temporary currency saved any questions as to its legality. Throughout this time we had the gold standard in operation, and the trouble was one that had no reference to standards. Agriculture, Commerce and Manufactures suffered alike from this inelastic feature in our banking system.

The system had other faults, the most serious of which was the redemption in gold, and reissue of the legal tender notes by the government, to be redeemed and reissued again and again. This latter fault, and some other minor ones, have been corrected in the passage of the new banking law by the present Congress. But the most serious deficiency, inelasticity, has not been removed. Under the present law, the quantity of currency is fixed, and in event of a panic, the currency would disappear again as it did before, and we would then have the same hard squeeze that we had before.

That feature of elasticity which was effected in a crude way, and in a way of doubtful legality, should be conservatively and properly incorporated in our banking system, and in a way to serve the national banks in every section alike. This would mean the total abandonment of United States bonds as a basis of note issue, and the substitution of the sound assets of the banks as the basis. These notes issued on assets should be taxed about I per cent. by the government, in return for which tax the government should guarantee the notes. Each bank should be responsible for the redemption of its notes in gold over its own counters, and in some commercial centre. The government guarantee would make all notes of uniform value, and the I per cent. charge would far more than cover any possible losses. The statistics on the subject show that, with proper inspection, as new practiced by the government, one-fifth of I per cent. tax would far more than cover the losses. At I per cent. the government would have no risk, but would get a large income.

The banking system of Canada is one allowing the issue of notes on assets. The Canadian banks are required to keep a guarantee fund of \$5,000,000 deposited with the government to secure notes. When this is deposited, the banks are taxed to make it good. Canada is notably free from the periodic financial squeezes that we have, and when one of these flurries occurs with us, our American deposits go in large sums to Canadian banks for safety. Scotland has a similar feature in her banking system. Her prosperity and her independence of London as a money centre is conspicuous and notable. The bank of France has the same feature.

While the bank of England has no such feature, yet it at times practically uses for re-discount the bank of France, which has that feature. It did this in the panic brought about by the failure of the Barings.

The greatest danger to our manufacturing interests lie in the inelastic feature or our banking system. While in the good times we have lately enjoyed, this deficiency gives us no trouble, it will do so whenever there is an industrial depression, and it will emphasize the depression.

CONCLUSION.

These conditions as to education, transportation, market and banking are as important in one part of our country as another. They are as important in Texas as in Maine, as important in Wisconsin as in North Carolina. Happily also, it has come to pass that the requirements of each section are identical. The future of spinning and weaving lies rather in creating the conditions necessary to develop and foster export trade, than in controversy between New England and the South over a limited domestic trade. We should get together and work together to bring about the conditions favorable to the prosperity of the whole country, and if we do this, I am confident there will be plenty of business and to spare to insure plenty of work for all American factories, and ample occupation for American people at fair wages.

A. C. Miller offers the following resolutions:

"ASIATIC COMMERCIAL COMMISSION."

"RESOLVED, That in view of the growing material interests which the South has in the extension of trade with China and Japan, where the sale of American manufactured and raw cotton has grown in ten years from Two Million Dollars to Twenty-two Million Dollars, the Southern Cotton Spinners' Association earnestly recommend the passage at this session of the bill before Congress providing for the appointment of a commission to investigate and report upon the commercial, industrial and economic conditions of China, Japan, and other Eastern Asiatic countries, for the purpose of further development of American trade in those lands."

Seconded—D. A. Tompkins. Adopted.

D. A. Tompkins offers the following resolution :

"RESOLVED, That the Southern Cotton Spinners' Association recommend to Congress the enacting of legislation carrying such compensations as will stimulate the development of American shipping interests under the American flag to an extent necessary to handle American commerce on the high seas in time of peace, and which will provide at the same time such transports and auxiliary service as may be needed in time of war."

Seconded-J. P. Wilson. Adopted.

D. A. Tompkins offers the following resolution :

"WHEREAS, It appears that one of the principal difficulties lying in the way of the construction of the Nicaraguan Canal seems to be due no doubt as to whether the Canal should be fortified or not, it becomes desirable for those business interests, for the service of which the Canal is proposed, to formulate some expression on this subject for the information of our legislators. Therefore, be it

"RESOLVED, First, That this Association hereby expresses itself in favor of the construction of the Canal under the provisions of the Hay-Paunceforte treaties and subject to such other treaties as may be desirable to secure the neutrality of the Canal in time of war and to free it as a commercial facility from all vicissitudes of war, but that our government shall be sole owner and reserve the right to fortify the Canal in event of any violation of those neutralizing treaties.

"Second, We approve the action of the House of Representatives in the passage of the Nicaraguan Canal Bill and recommend speedy action on the part of the Senate."

Seconded-R. B. Miller. Adopted.

Address by Mr. Arnold B. Sanford, President and Manager of the American Cotton Yarn Exchange, Boston, Mass. Subject : "Fine Cotton Manufacturing in the South."

Address of Mr. Arnold B. Sanford.

In discussing this important and very interesting topic, I shall confine myself to the spinning of Fine Yarns, and the long Staple Cottons used in their productions, the "Allen Seed," "Sea Islands," and "Egyptians." It is my desire to treat this subject without any prejudices whatever ; to deal fairly and justly with the conditions as they exist both in our New England and Southern States, and as they appear after twenty years of experience in close touch with the great Cotton industry, North and South. Now, in order to make the discussion practical and lively, we will commence by propounding the following questions, and seeking a true solution to the same later on :

FIRST. WHAT ARE FINE COTTON YARNS, AND WHAT IS NECESSARY FOR THEIR SUCCESSFUL PRODUCTION?

SECOND. ARE THE SOUTHERN MANUFACTURERS PRE-PARED TO PRODUCE THEM SUCCESSFULLY AND COMPETE AGAINST NEW ENGLAND MILLS?

THIRD. CAN THEY MAKE AS MUCH MONEY ON FINE YARNS AS THEY CAN ON THE COARSE AND MEDIUM NUMBERS?

Before taking up the questions, I wish to make a few remarks on the cotton industry.

The establishing of any great Textile industry, like cotton, wool, linen and silk in any country is a very slow process, and usually takes generations to plant firmly and successfully. Why? Because first we must learn to handle it so as to produce goods of the best qualities, with the largest productions, and at the lowest possible cost. This can only be accomplished by skilled labor, capital and experienced management to bring success. This takes years to bring around. The silk industry of Lyons, France, still leads the world in the production of the finest goods, and it was commenced in the fifteenth century. The woolen industry : We turn at once to Leeds, England, for the finest goods and colors ; she leads the world, and it was commenced there in the sixteenth century.

The cotton industry : Great Britain, with her 46,000,000 spindles, leads the world in the great race, and Oldham, Bolton and Manchester are made famous for their fine cotton goods and yarns. The manufacture of cottons commenced in Manchester in the fifteenth century, and in the year of 1552 an act was passed for the better manufacture of Manchester cottons, which became famous in the year 1650.

The New England States, though engaged for a century in the business, seems quite young compared with old Eng-

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land, yet she has made her Lowell, Fall River, New Bedford and Lawrence famous for her cotton manufacture.

In this connection the following figures will be of interest, showing the growth of the industry for England and United States :

The tota	al Spi	indles c	of Great B	ritain,	estim	ated	Jan.	1, 1900,	46,000,000
4.6		"	United S	States,		" "	6.6	6.6	21,000,000
6.6		66	New Engl	and St	ates,	" "	"	66	13,955,000
6 6		£6	Southern S	States,	inclu	ding	year	1900	5,250,000
		FO	OR NEW	ENGL	AND	STA	TES	• •	
	1840	Numbe	er of Spind	lles				1,597,4	00
	1850	6 6	6 E					1,800,0	00
	1860	6.6	6.6					3,859,0	00
	1870	6.6	6.6		•••••			5,498,3	00
	1880	6 6	6.6					8,632,1	00
	1890	6.6	6.6		• • • • • •			10,836,2	00
August	1899	¢ (6.6					13,955,0	

Representing say \$280,000,000.00 of capital, this magnificent result speaks volumes for the thrift and energy of our New England manufacturers and operatives, which means so much for the prosperity of the New England States.

FOR SOUTHERN STATES.

•	1840	Number o	f Spindl	es	180,900
	1850	٠ ٠	66	· · · · · · · · · · · · · · · · · · ·	230,000
	1860	6 6	66		298,600
	1870	<i>« «</i>	6.6		327,900
	1880	<i>« «</i>	66		1,554,000
	2890	6 6	٠،		3,670,290
For	1900	66	6 6	estimated	5,250,000

For the fifteen months ending March 31, 1900, projected 2,000,000 spindles, a tremendous growth, and the South will have for the end of the year 1900 \$125,000,000 invested in the cotton industry—a most magnificent showing for our Southern manufacturers and operatives. This remarkable result is a splendid tribute to the energy and enterprise of the Southern people, and challenges the admiration of the the business world, and some are saying, *Southward the course* [not of Empire] *but of the cotton industry takes its way*.

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Let us now take up our questions.

FIRST. What are Fine Yarns, and what is necessary for their successful manufacture?

Fine Yarns in the trade to-day means numbers 80's to 140's, inclusive, and to make this clear to you, note the production per spindle on No. 80's Yarn running sixty hours per week, which produces only $\frac{1}{3}$ of a pound per spindle, and for No. 100's only 1-5 of a pound per spindle per week. There are several necessary factors required to produce high grade fine yarns. It is absolutely necessary to have the very best skilled operatives that can be secured.

The manager should have long practical experience, and be well acquainted direct with the consumer, so as to be able to meet his wants. He requires expert knowledge of the long staple cottons used such as:

"

Allen Seed, 13% to 11/2 inches long.

Sea Island, $1\frac{1}{2}$ to 2 "

Egyptians, 13/8 to 17/8 " "

Very careful selections must be made so as to secure proper fineness of fibre and uniform lengths of staples "as so much depends upon this." These cottons are very expensive, and the manufacturer should understand this part of the business well, so as to know just what lengths of staples and grades are required for the various kinds of yarus to be made; if he does, he can save considerable money over one who does not.

Great care and economy must be exercised in all the various processes of picking, carding, combing, drawing, rovings, spinning, twisting, reelings, sizing, etc., in order to produce high grade yarns, and eternal vigilance must be constantly exercised. The Southern manufacturer will find making No. 80's to 100's yarns altogether different business than the making of No. 30's and 40's.

SECONDLY. Are the Southern manufacturers prepared

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to produce them successfully and compete against New England mills?

My answer to this very important question would be, "To-day they are not," and this conclusion has been most carefully arrived at by a close study of the conditions surrounding the industry in the South, and from personal observations. Some of my reasons are as follows :

The successful production of fine yarns on a large commercial scale and with profit, requires experience and most favorable conditions for labor and economical management.

The South, up to the year 1880, made yarns, No. 30's and below, and did not take up No. 40's until about the year 1885, and to-day has only about 100,000 spindles on No. 40's to No. 50's yarns, and only one mill of 5,000 spindles on No. 80's to 100's, recently started.

New England waited about fifty years, until the year 1880, before her manufacturers thought their conditions would warrant undertaking the fine goods and fine spinning.

Now, from what I have observed in my travels South, there is not one location in a hundred that I have seen that has the right conditions to prosecute the spinning successfully of No. 80's to No. 140's, and, in my opinion, the conservative manufacturers themselves do not think the conditions warrant it.

Of course I must admit our Southern manufacturers have proved remarkably apt scholars, and in course of time will aspire for the fine goods and yarns—and build some mills but they will feel their way cautiously and will wait several years longer before attempting it on a large scale.

But we do not see how they can in the nature of things compete successfully with the old established mills of New England. Of course I am willing to admit that their advantages of longer hours and cheaper labor count much in their favor, but until that labor is educated up to the highest standard of skilled labor they cannot very well compete against New England.

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I have been quite freely quoted as being the pioneer in building mills for spinning fine yarns in the South. Now, that depends altogether on what are called fine numbers by Southern manufacturers; but I am willing, however, to admit that I have built the first mills for spinning HIGH GRADE COMBED YARNS for medium numbers, 20's to 70's, and feel confident they will prove a profitable investment, and prefer to take my chances on them for the next ten years and leave the field on the finer Nos. 80's to 140's, for the other fellows.

THIRDLY. Can they make as much money on fine yarns as on coarse and medium numbers?

My answer to this question is : From most careful observations, they cannot make as much money spinning fine yarns as they can coarse and medium yarns. Why? Because their disadvantages will overbalance their advantages. On the latter they can only claim longer hours and cheaper labor, while their disadvantages will be lack of skilled operatives, lack of economy in general management necessary for fine manufacturing, and also lack of intimate experience direct with the consumers.

The Southern States are naturally adapted to the coarse and medium yarns and goods, say from No. 8's to No. 60's. These do not require the skill, experience and economy to produce them as do goods and yarns of from No. 80's to No. 140's.

They also gain on this class of goods on cotton over their Northern competitors, as they can use staple growing close to their mill doors, and thus save freights. While, on the other hand, it will cost them as much for long staple cotton as our Northern Mills, and for Egyptains fully one half cent per pound more. My advice is for the Southern manufacturers to stick close to the coarse and medium counts, which they can make with more profit than they can fine. The South has a splendid future before her in this field 126

and for the next ten to fifteen years should increase on goods and yarns from No. 40's to 60's.

But there is a very serious problem facing the Southern and New England manufacturers, especially the Southern. What are they going to do with the 2,000,000 spindles which are to be added for the year 1900. This product must find a market somewhere. "Where?" It is stated by experts in the cotton industry, we can now produce in nine months all we can consume in twelve with our "Home Market," and some predict inside of one year we shall be over-producing again.

Now, gentlemen of the Southern Cotton Spinners' Association, your Association and the New England Cotton Manufacturers should strike hands at once, and immediately arrange to seek export trade. Sell part of your products to the foreign trade; seek an outlet for at least 25 per cent. of your goods, for the home market cannot take care of these 2,000,000 additional spindles, and now is the time for bold and aggressive action. The American Cotton Manufacturers should not ignore any longer the foreign trade, but lay plans for securing markets for their surplus products. Don't delay it any longer than possible, and in order to keep the great cotton industry of the United States in a healthy and prosperous condition our manufacturers should not depend entirely upon the home markets, for if, as has been stated, the cotton mills of this country can produce in nine months all the consumers here can use in twelve months, and the South is now for this year, 1900, to increase her output fully 33¹/₃ per cent., it certainly looks as though in the near future, we shall be over-producing again. You all know what that means, when you have to urge the buyer for orders.

This can be avoided only in one way; sell your surplus products to the Foreign trade, and thereby prevent a glut of your home markets.

The New England and Southern manufacturers have ar-

rived at the stage where they should be willing to freely consult each other's interest upon broad lines for their mutual protection. They can provide the ways and means, and so regulate the production of their mills that both sections can do a profitable business.

I hope before this Association adjourns you will pass resolutions for the necessary steps to be taken for the American Cotton Manufacturers to create a Foreign Market for a part of the product of their Spindles and Looms.

Great Britain exported of Yarns and Threads value for the year 1899, \$57,187,000.

Address by Mr. Leonard Paulson, of Buckingham & Paulson, Yarn Commission Merchants, New York City.

Address of Mr. Leonard Paulson.

Mr. President and Gentlemen of the Southern Cotton Spinners' Association.

In addressing you, I cannot refrain from congratulating you upon the changed conditions under which this Convention is held, compared with those prevailing a year ago. Then cotton was high, prices of yarn were low, trade dull and the outlook by no means inspiring. To-day, if cotton is still high, yarns are still bringing profitable prices; business has been and will be good again, and in spite of some doubting "Thomases" the outlook is decidedly encouraging.

Towards this improvement, your Association has unquestionably contributed largely. It has consolidated the spinning interests of the South, has removed causes of friction which have existed in the marketing processes, making pleasanter and therefore more advantageous from a

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business point of view, the relationship of the Spinner, the Selling Agent and the Consumer. And in addressing you upon "The Sale of Cotton Yarus" I cannot do better than consider these three interests in the order I have named them.

First. The duty of the manufacturer is simple; it is to deliver merchantable yarns, fully up to the requirements of the order given to him; also to see that he makes his deliveries according to his contract. If he fulfills these conditions, his obligation ceases.

Second. When the Agent gives the Spinner an order at a certain price, specifying the quantity and quality he has sold and the deliveries that must be made, he has done his part, for which he is to receive a commission of say five per cent. This commission guarantees the manufacturer one hundred cents on the dollar and covers all charges (except discount for cash, interest on advance and other fixed charges) after the yarns reach their destination. Should the customer conclude that he does NOT want any part of the yarn and decide to cancel all or part of his contract, the Spinner has nothing to do with it; that is a matter entirely with the Selling Agent; and if he allows his customer to cancel an order, it is at his own cost; and he has no right to ask the manufacturer to bear any part of the burden. It has already been decided, that when a commission merchant places an order with the manufacturer, the commission merchant receiving a commission for guaranteeing one hundred cents on the dollar, that the manufacturer's obligation ceases after he has made his delivery according to contract. He does not know the customer, and probably doesn't want to.

I understand, that some claim, when a customer cancels an order, the spinner is responsible, claiming that the commission merchant is acting *as agent only*. In these enlightened days that doesn't go, provided the spinner has kept his part of the contract; also providing the agent is receiving a commission for guaranteeing the account. Of course, if the agent is working on a brokerage of one per cent. or two

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per cent. and does NOT guarantee, then the spinner has to stand the cancellation; also take the risk of the buyer paying his account in full. But as business is done now, and as I understand it and as we do our business, five per cent.commission *guarantees everything* after the yarn reachesus. We guarantee one hundred cents on the dollar also that our customers will stand by their contracts; and to do this,, all we ask of the manufacturer is, that he keeps his part of the contract to the letter. All selling agents should do the same. If they do not do it, it is your place to compel them to do so. It takes two to make a contract; it takes two to cancel it.

It doesn't require a map to explain what a guarantee means. As an illustration: Suppose an agent should sell for you one hundred thousand pounds of yarn at twenty cents per pound; after he had delivered fifty thousand pounds his customer should fail, leaving fifty thousand pounds of yarn on hand or due him. In the meantime, undoubtedly, you had secured cotton to produce this one hundred thousand pounds of yarn, and the price of yarns had declined say five cents per pound. Suppose the customer makes a compromise with his creditors, we will say for fifty cents on the dollar. The selling agent certainly would not look to you to stand this loss, as he has guaranteed it. Now, would it be fair for him to ask you to take the risk of the market on the other fifty thousand pounds? If he guaranteed part of the contract, he certainly guaranteed it all; and if he asks you to accept fifteen cents per pound for the fifty thousand pounds of yarn that he sold for you at twenty cents, he has just as much right to ask you to accept fifty cents on the dollar for the fifty thousand pounds which he has delivered to his customer. There is only one kind of a guarantee, and that is to guarantee one hundred cents on the dollar on the entire contract. He guarantees all or "What is sauce for the goose, is sauce for the nothing. gander."

Please do not understand me to say, that there cannot be any cancellations, for there are times when you must accept them from your agents. If you do not make your deliveries on time as agreed, and also keep the quality of your yarn fully up to the requirements, the customer has a perfect right to cancel his contract; and you must accept the cancellation from your Selling Agent.

At this point, I want to explain something that some Manufacturers do not appear to understand. That is, the three and five per cent. Quite a number have said to me, "You Agents get three and five per cent. or eight per cent. for selling yarns."

This is NOT the case. The discount of three per cent. for cash in ten days *goes to the buyer*; and is in fact a part of the price, leaving the agent only five per cent. for expense and guaranteeing, which is little enough. I have been in the Yarn business since 1863, and I have never known of a single instance of any Agent making enough money to retire; but I could name quite a number who have failed.

Time was when the third interests, the Consumers, were regarded by the Spinner as ever on the alert to take undue advantages. That impression, thanks to your association, is rapidly dying away. You find, that as a class, they are honorable business men and stand by their contracts, as all must do. If they get the worst of it, they take their medicine like men; and if they get the best of it, they expect you to take your medicine and look pleasant. They will do everying they agree to do, and they expect the same treatment from you. Of course they had a hard time when vou first advanced; but it might have been worse. They have been getting a fair advance on their production; and if they did not get it, it was their own fault. All of us had contracts at low prices which we were compelled to fill. They also had contracts at low prices which they were willing to fill; and they were also perfectly willing to pay an advance for yarns for their requirements, for the reason,

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they could get an advance for the product of their Looms. There are of course exceptions in every class, and there are buyers who will try to lay down on a contract if it goes against them; but do not let your Selling Agents tell you that their customers will not take their contracts, and ask you to stand the loss. As I have said already, you have nothing to do with their customers; the responsibility is with your Agents. We are willing to stand by this statement and carry it out. I think we have shown in the past that we have done this, and I am willing to stand by every word I have said to-day.

As to the prices of cotton yarns, I am not prepared to say what the future will be; but I can tell you this, nearly all the Spinners of the South as well as the Spinners of the East, have their product sold several months ahead, some of you being sold until September. Most of the Weavers who consume this yarn are also well sold up; in fact it has been impossible in a great many cases for them to deliver five or ten packages of their fabrics at any price, for prompt delivery. If they told you they could not afford to pay the prevailing prices for yarns, because they could not obtain a corresponding advance on the product of their Looms, as they were in about the same position as you, unable to fill any orders for prompt delivery, if they sold their production at a loss it was their own fault. A great many Weavers have told me they did not want lower prices, as a decline in yarns means a decline in their products. The business of the country was never so good as it has been for the past year. Any line you may take, you will find have been and are now behind on their orders. I do not see the reason for the break, unless it is caused by Spinners pressing for orders for future delivery and weak-kneed Selling Agents forcing sales. But the break is here and we must meet it.

There was an article published in the *New York Journal* of *Commerce* on March 17th, headed "The Future Course of Prices." It was taken from a circular issued from Boston,

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in which they say "That the Spinner is entitled to a reasonable margin profit on his production. Anything beyond that, is unhealthy and demoralizing both to the Spinners and the Consumers' interests. They said that the prices then ruling were simply prohibitive; and the Consumer could not pay such values and convert the yarn into goods and get out whole; and they feared it would curtail the consumption of yarns and the Spinners would want orders." I big to disagree with the writer of that article; and claim that the values of yarns at that time were not prohibitive; and I also claim, as I have stated before, that the Consumer could get a sufficient price for his production to warrant him in paying the prevailing prices of yarns, for the reason that he was sold ahead, and on future orders he was not compelled to accept, unless he could get a profit on the cost of production. Articles of this kind, do not help sustain the market. If it were true that the advance in the prices of Cotton yarns was unhealthy and demoralizing, then what about Steel Rails which advanced from Fifteen dollars to Thirty-three Dollars per ton, an advance of one Hundred and Twenty per cent.? What about Nails, which have advanced from One Dollar and eighty cents to Four dollars and twenty cents per hundred pounds, an advance of One hundred and thirty-three per cent.? And what about Copper, which advanced from Twelve to Eighteen and a half cents per pound, an advance of Fifty-four per cent? What about Four-yard sheetings, which advanced from Three and a quarter to Five and three-eights cents per yard, an advance of Sixty-five per cent; and what about Print Cloths, which advanced from One and three-quarter cents to three and a half cents per yard, an advance of One hundred per cent? The cost of producing all these, has NOT advanced more than the advance in the cost of producing Cotton Varns. In fact, nearly all manufactured goods advanced from twenty-five to one hundred and thirty-three per cent. It appears, for all these products the advance is sound and

healthy; then pray why is the advance on Cotton yarns unhealthy and demoralizing? I must confess, I do not know. The cost of producing yarns has increased very much in the last year; the loss in waste is much greater; the cost of all supplies has advanced; labor is also higher, and no one can produce yarns at the same cost as they did in May last.

The question of the price of cotton or cost of producing does not enter into the price of yarns; supply and demand cover If a consumer can buy yarn at ten per cent. less it all. than cost of production he will not pay any more. While I do not favor killing the "goose that lays the golden egg," which is the man who buys the product of your spindles, I think it only fair to get the best price we can for your pro-It does not make any difference to the consumer duction. what price he pays for his yarn, whether it is fifteen cents or twenty-five cents per pound, providing his competitor cannot buy the same yarn for less. If they all have to pay a uniform price for yarn they will get a fair price for their product, consequently, all will make a profit and all be happy.

Having noticed the three interests in the home trade, I desire to draw your attention to another important question coming rapidly to the front in the "Sale of Cotton Yarns" and that is, the necessity of looking for foreign markets for the near future. The intense activity in Southern Mill building and the increasing stream of projected enterprises, must make this imperative. What the home market has done in the past is no criterion of what it may be able to do in the future with such steady and large expanse of production.

The South is well qualified to compete for foreign yarn business. Formerly, a great many of the yarns you are now producing, were made by New England Mills only. The Southern Mills on these numbers are now turning out yarns equal not only to those of New England but of old England also, while in coarse yarns the South *can beat the world*.

There is a large foreign demand for cotton yarns. Last year England exported \$40,000,000 worth, while our total exports of all cotton goods manufactured last year were but \$19,000,000. We boast of the progress we are making with that branch of our export trade, and yet our total is not fifty per cent. of England's export of yarns alone. There is no reason why that should be so, provided you spinners will be as willing to comply with the demands of foreign markets in reeling, packing, etc., of yarns, as the Cloth Manufacturers are in lengths of Cuts and packing and other requirements of their customers. Believe me, this is a matter which you cannot afford to neglect; and I cannot better close this somewhat crude address, than by advising you to apply yourselves earnestly to the cultivation of foreign markets. They are an elastic outlet for surplus production, a safety valve for the home market to support the values in it.

Prof. Geo. T. Winston, of the Agricultural & Mechanical College, Raleigh, N. C. makes short address on the "Textile Schools and the great need of same."

R. B. Miller offers following resolutions:

Resolved: That this Association views with great satisfaction the establishment of Textile Schools by the City of Philadelphia, States of Massachusetts, South Carolina, Georgia and Mississippi, and earnestly recommend similar action to other States, where the Textile industry exists, or may be introduced. The Association considers Textile Schools to be essential to the development of the Textile industry and therefore a necessity and profitable investment for all states engaged in that industry.

Seconded-D. A. Tompkins. Adopted.

Mr. Geo. E. Wilson offers the following resolutions :

Resolved: That a committee of five members be ap-

pointed by this meeting to attend the next meeting of the New England Manufacturers' Association meeting, for the purpose of conference, and to arrange, if possible a joint meeting of the two Associations.

Seconded—D. A. Tompkins. Adopted.

Adjourned.

YOUNG MEN'S CHRISTIAN ASSOCIATION BUILDING, 8 P. M.

Mr. D. A. Tompkins introduces Hon. John Barrett, Ex-United States Minister to Siam who addressed the members of the Association on the Subject of "Commercial Advantages of the Far East."

Address of Hon. John Barrett.

China is the South's necessity. The future well being and industrial development of the South depend more on the market of China, than upon those of any undeveloped part of the world. If the demand for the manufactured cotton goods of the South, which is rapidly increasing in China, should be suddenly and permanently closed or lost to the South, the result would be a great industrial depression which would throw this section back where it was before the wonderful progress of the present.

Too strong terms cannot be employed to emphasizing this point. I may be called an enthusiast by some, but not by those who have studied alike the possibilities of our own Southland and the mighty Empire of China. The potentialities of China are the economic complement of those of the South. Therefore there should be a unanimous sentiment from one end of Dixie to the other in favor not only of the legitimate expansion of trade- and commerce in the far East, but of fully preserving and protecting the advantages and interests which we already possess.

Six years continued study of the industrial and economic conditions of China and other Oriential lands has convinced

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me that the Southern States of America have more vital concern in the development of Asiatic commerce than any other section of the United States, except possibly the Pacific Coast commonwealths of California, Oregon and and Washington. Were I to say this in a casual way or from a passing visit to China, I would not invite your belief and confidence in such a broad statement. My conclusions are the gradual outcome of thorough investigation.

You are so familiar with the actual situation of cotton growing and manufacturing in the South that I shall spend no time in discussing that feature of the problem, but shall consider just what is the South's opportunity for the sale of its great staple product in both manufactured and raw form throughout China and adjacent lands.

What do we see before us? We note in China only one part of a wonderful coast line which reaches from Tasmania, South of Australia and near the Antarctic circle, right away to Eastern Siberia and the Arctic circle, broken only by narrow straits, but indented everywhere with magnificent harbors upon which are located great and populous trade centres. It reaches for 8,000 miles, opposite our own Pacific shores. It has tributary to its waters a population of over six hundred million (600,000,000).

It already possesses a foreign trade of nearly two billion (\$2,000,000,000), of which America's share at present amounts to only \$200,000,000, or barely one-tenth. When we have exploited this immeasurable field of demand and supply as we have other foreign markets and our own home markets, our share should be at least half or \$1,000,-000,000 (one billion), including both imports and exports.

This is a general view of the situation in the far East. Now let us glance more specifically at China. The immensity of the opening almost appals us. There is an Empire of 4,000,000 square miles, or greater than all the United States with even its new dependencies; a population of four hundred million, or five times that of the United States, and only 400 miles of railway, or, not more than enough to lay a single track from Charlotte to Washington. Imagine what must follow railway construction all over China and the opening up of the interior. It will directly affect the demand for manufactured cotton goods as it will that for all classes of foreign manufactured articles, a demand which always follows extended railway construction and consequent building up of new conditions of life in any new country. China may be ancient in religion, philosophy and racial characteristics, but materially she is in her infancy. She has vast virgin resources yet untouched together with all the conditions of population which insure a material and a moral progress in the not too distant future, which will astonish the world.

China's demand for the manufactured cottons of the South is the most interesting feature of her new commercial life. It is true that this trade is an old one and that long years ago America was exporting manufactured cotton to the Orient, but the rapid strides which have been made in the last few years have opened the eyes of the world to what may yet come. Only six years ago, when I first visited Fowchang, the gateway to Manchuria, American cotton goods made only 15 per cent. of the total imports at this point; on the occasion of my last visit, about a year ago, American cotton goods, principally from your Southern mills, were 55 per cent. of the total imports.

In 1889 the total value of cotton manufactures exported from the United States to the far East were \$1,600,000; in 1899 they exceeded \$10,000,000. The quantity and value of raw cotton exported from the United States to the far East in 1889 amounted to respectively 23,500 pounds and \$2,341; in 1898 the marvelous increase was measured respectively by 118,000,000 pounds and \$7,870,896. The annual average of the quantity and value of raw cotton exported from the United States to the far East from 1889 to 1893 amounted respectively to 1,150,000 pounds and \$105,000; the annual average from 1894 to 1898 was respectively 37,000,000 pounds and \$2,500,000.

In all probability, judging from the opinion of the best experts, the United States will sell to the far East during the present year of 1900 manufactured cotton goods valued at over \$12,000,000, and, exceeding in bulk 220,000,000 pounds.

The value of raw cotton sold principally to Japan, in contrast to the manufactured goods sold to China, may reach from present prospects for this year \$10,000,000. This makes a possible total of \$22,000,000 of Southern products sold to the far East, where ten years ago the total did not exceed \$2,000,000. If this increase continues during the the next ten years, even at a lesser rate than during the past ten years, the South should sell manufactured and raw cotton in the Orient, valued at not less than \$50,000,000. These estimates, by a careful study of percentages, will prove that my figures are conservative.

We do not have to go back far in the records of the State Department to find consular reports which said that the Chinese people would never consume large quantities of American manufactured cotton. One consul of acknowledged ability predicted that in 1900 the demand would practically cease and that the mills of China and Japan would supply all the Chinese wanted. Now we witness a demand for the product of your Southern mills increasing more rapidly than that for the output of the Japanese mills and even underselling them in the open markets of their own country and China.

In answer to the inquiry : what of the future? Let me call your attention to the fact that out of China's 400,000,-000 of people you are not now reaching more than 40,000,-000, and then in competition with other countries. Supposing that the time comes that America shall sell even the small average of twenty-five cents worth per head of cotton goods to China's entire population, we have an

annual consumption of \$100,000,000. It is often stated that we cannot compete with Europe successfully in all China, for instance, in the Yangste river valley and in the valley, which Sekiang river combined support a population of 200,000,000 and which are at the present practically unexploited by us. This prediction was made in regard to the Northern part of China which contains her other 200,000,000 people, but in the same way that we are becoming masters of the Northern section, we shall eventually control the Southern portion. It is simply a question of providing what the Chinese want, and of being able to sell it at prices that will compete with the mills of England and Europe. To-day our field of influence is from Shanghai, the New York of China, north into Manchuria. South of Shanghai, England, the continent of Europe and India are masters of the market.

The doubt is often expressed that the Chinese have not the money or the sufficient buying capacity to keep up increasing imports from foreign lands. I would combat this statement most emphatically. The records of the past support my conclusions. Everything depends upon the opening up of the interior, and in reform and improvement of government. Given these two new conditions, and you will find that the Chinese will buy all you have to sell and sell all you want to buy. In other words, if China's millions can develop their resources and get their products to market they will spend their increased earnings in increased purchases.

In proof of this assertion, note the wonderful history of the Yangste river valley, one of the most fertile and populous sections of the world. Fifty years ago when the first treaty ports were opened to foreign trade along this river, the total of \$500,000 for one year represented all that the Chinese wanted to buy and sell, while one little side wheel steamer carried up and down from Shanghai, on the coast, to Hankow, 700 miles in the interior, all the freight and passengers to be handled. In 1899 the annual trade of the Yangste valley exceeded \$100,000,000, while a larger fleet of ocean and river steamers plied up and down the Yangtse than on the Mississippi, Columbia and Hudson rivers combined. Moreover, you can travel from Shanghai to Hankow in steamers as large and magnificent as those which run from New York to Albany on the Hudson. If any of you doubt my statements, I beg of you to seize the first opportunity for a visit to the far East.

The question of possible Asiatic competition is one that disturbs some who are pessimistic of the future. From careful investigation of Asiatic possibilities of labor, social conditions and considerations of demand and supply, I am convinced beyond issue that the danger of serious competition is too remote to embarrass our present and future plans. It is a fallacy to suppose that there is an overabundance of cheap labor in Asia. While it is cheap compared with ours, it is not cheap compared to conditions of life and extent of population. There is in fact little surplus labor in Asia to-day, and that will even be less marked as the material development of Asia pushes alread. It may surprise you, but it is true, that labor has increased in price in the Chinese ports over 50 per cent. during the last ten years, while in Japan it has increased nearly 100 per cent., and in both sections labor is better organized even than it is in America, in great guilds and societies, and is making imperative demands on capital and employers. Wherever a few hundred men in an Asiatic cotton mill, or other manufacturing plant, become skilled, they immediately demand a proportionate increase of wages. Their employers are forced to concede the advance, or delay many months to educate others to equal skill.

In these days, moreover, mere numbers do not make competition in labor. Considerations of machinery, economy in production and manufacture, material and moral surroundings, and skill based upon advanced education and mentality, are the main influences that decide the great problem of competition. Whenever China and Japan shall have made such marvelous strides that they can successfully compete with our present conditions, we will in turn have advanced so far that we will always be able to lead them or at least hold our own in the manufacture and export of the great staple products of our own land. I speak of competition for the sale of our product in foreign lands; the competition for the sale of products in our home markets will be limited to our own producers by a protective tariff in the future as in the past, if necessary.

It has been advanced in Congress and the public press that the South must look with hesitation upon the acquisition of the Philippines because of possible competition in producing and manufacturing cotton. This again is a fallacy that can be dispelled by the facts. It is true that there are certain portions of the Philippines in which excellent cotton can be grown, but such area is so limited that its total output will always be insignificant compared to that of the South, and not larger than that of the one State in the South producing the smallest amount. If all the Philippines were planted with cotton their product would not affect the general market, but that time will never come. The Philippines can raise the great staple products of hemp, tobacco, sugar, copra, rice, and many lesser products to far greater profit than they can ever raise cotton. There is, moreover, no more danger in competition for mills that may be established there than from those established already in Japan and China. The Philippines will go on to a magnificent commercial, industrial, and agricultural future; they will not be occupied in competition with us in our home markets, but in helping to supply the vast growing demands of Asia's uncounted millions. Moreover it is well to note that the Filipinos, the more they are educated and brought in contact with the

foreign world, are a race of people who buy more and more of foreign products.

One wanders even into wonderland of possibilities, but draws conclusions from legitimate premises when he estimates the measure of Asiatic trade in the future from what has been done in the past. To honestly determine what China, for instance, may yet accomplish let us see what Japan has done. The kingdom of the Mikado has developed its foreign commerce from less than \$30,000,000, or not quite \$1 per head, to nearly \$300,000,000, or over \$6 per head, in thirty years. On the other hand we note that China's foreign trade today is not quite \$300,000,000, or less than \$1 per head. As an estimate of what China can do in the future, when her interior shall be opened and she has experienced the governmental and educational progress of Japan, let us multiply China's total population of 400,-000,000 by 6, the rate of Japan, and we have a magnificent total, including imports and exports, of \$2,400,000,000. Divide this in half to get the imports and we have the large sum of \$1,200,000,000. Now if we will look over the list of China's imports we will see that two-thirds, or at least half, of them might be supplied by the United States, giving us an export trade with China alone of \$600,000,000.

This may not come in this generation, but it must as surely result within the next fifty years as it has been true of Japan proportionately during the last thirty years. The student of the resources and the peoples of China and Japan readily acknowledges that under favorable conditions China should even more than duplicate the achievements of Japan.

If we send to the Orient without delay the proposed Asiatic Commercial Commission we shall learn that long array of fundamental data which are necessary to our manufacturers, agriculturists, and general producers, to master this mighty field and hold our own with the rest of the world in the competition which is now developing for its permanent control. Let us moreover foster in every way our merchant marine, that it may carry to Asia and other lands our products under the American flag. If we have been granting local subsidies all these years for railways in states, counties, and towns, in order that we might get the advantage of better transportation facilities, certainly we should support a policy which will allow our governto subsidize vessels on the high seas which will put us in touch with the rest of the world as these railways, aided by gifts of counties and towns, have united the whole country.

Time limit alone forbids my showing what markets there may be in Asia for other Southern products, such as manufactured iron and steel, and the various manufactured and raw products which this section will soon be able to furnish to foreign lands in competition with the rest of the world. The demand will surely not be confined to manufactured and raw cotton alone. When the Isthmian canal is opened, and great steamers are running direct from your Southern ports to those of Asia, you will marvel at the variety which their cargos will contain. Furthermore I regret that I have not time to discuss the specific opportunity, in a country like Siam, one of the richest and most progressive lands of Asia; of Korea, which awaits American development; of Eastern Siberia, with which already we have a large and growing trade; of Japan, whose foreign trade has developed from \$30,000,000 to \$300,000,000 in the last 30 years, even showing an advance which rivals the record of our own country; of the Philippines, the richest portion of all Asia, whose foreign trade of \$33,000,-000, reached under Spanish rule, we shall expand to \$150,-000,000 in the next ten years, and which are the geographical, strategical, and commercial centre of the wonderful coast line, above mentioned, that winds in and out from Melbourne in Australia to Vladivostock in Eastern Siberia, and which will make us eventually not only the first material but the first moral power of the Pacific and her adjacent millions of people and trade.

Before concluding, permit me to say in answer to many inquiries, that there are certain local conditions in China and general conditions in the Pacific upon which the permanent prosperity and growth of the markets for the products of the South in Asia depend. First, we must preserve and protect fully the present field of trade by maintaining the so-called "open door," which means simply the preservation of our treaty rights of trade, for which Secretary Hay has recently secured such important and farreaching concessions from the European powers. Second, we must use all of our political, moral and material influence to maintain the integrity of the Chinese empire, and thus prevent subdivisions of her vast territory which might, under the sovereign control of competing nations, be eventually closed against us. Third, we must exert our statesmanship to persuade China to open her entire interior to the free commerce of the world and to make such reforms and improvements in her administration of government as will bring both her and us the greatest good, and without which stagnation and even retrogration may result. Fourth, American capital and enterprise must devote themselves to building railways and developing the resources of the empire so as to increase both the buying and selling capacity of the people. Fifth, Congress should authorize without delay the appointment of a Commercial Commission, in accordance with the President's recommendation in his last message, to visit and study thoroughly the economic and industrial conditions of China and adjacent lands for the purpose of better understanding and developing the exchange of trade. Sixth, and finally, our government should build without delay the Isthmian canal to connect the Atlantic and the Pacific, lay the trans-Pacific cable to join our Pacific shores with Hawaii, the

Philippines, Japan and China, and assist in every legitimate way the development of American merchant marine.

With these ends accomplished the South will enter upon the full fruition of her greatest hopes and possibilities.

At 11:00 o'clock in the rooms of the Chamber of Commerce and Central Hotel dining room, a banquet was held at which some 325 people were present, representative of the best in prosperity of the North and South.

The two banqueting rooms were very beautifully and tastefully decorated. Bush was the floral artist in charge. Flowers, ferns, roses and tall palms were here, there and everywhere in charming arrangement. From end to end of the long dining-room in the hotel electric lights in colors were suspended, this being the courteous favor of the Southern Electrical Company which contributed electrical display.

There was "Welcome" written over the door of the dininghall, and welcome was the generous, whole-souled keynote of the entire banquet.

In material matters the credit of the success of the feast is due to the Central Hotel, the caterer. The management of the hotel made ample provision for their guests even to the most minute detail. The menu, as follows, was all that it should be :

... Menu ...

Little Neck Clams _____

Consomme, Royal Celery

Sherry

Broiled Pompano, Maitre d'Hotel

Sliced Cucumbers

Julienne Potatoes

Small Patties, Salpicon Olives

Salted Almonds

Fillet of Beef, Larded, with Mushrooms Green Peas

Punch, a la Francaise

Turkey, Cranberry Sauce

Potato Croquettes

English Wild Duck, Currant Jelly Corn Fritters

Champagne

Chicken Salad

Strawberry Ice Cream Lady Fingers Macaroons Kisses **Chocolate Eclairs** Vanilla Waters Raisins Fruits Nuts Cheese Crackers Cafe Noir Cigars

Mixed Pickles

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Cold Tongue

The first toast, "Our Welcome," was gracefully and handsomely made by Mr. George E. Wilson.

Gentlemen: It gives me great pleasure to welcome you to this banquet hall. I have no formal words with which to greet you. Formal addresses, at best, are but cold and are poor vehicles to convey expressions of friendship.

I want to speak to you as man to man and from our hearts to extend to you our cordial thanks for your presence and a warm welcome to each and all.

The time of your visit is auspicious. Nature has adorned herself in her youthful garb to greet you, and as this gladsome spring-time is soon to pass into the more glorious summer, so will the deliberations of your convention confined now to its own members, but when published to the world, command that increasing respect until the object you have in coming together will have been successfully accomplished.

The place of your meeting is not without historic interest. It may not be known to you, but it is true nevertheless, that within a stone's throw of this room was promulgated the first declaration of American independence of British rule, and in the struggle for American liberty that followed, our people won from the British commander the proud distinction of being the Hornet's Nest of American rebellion.

This place, too, is the centre of the manufacturing interest of the South. Within a radius of one hundred miles, are enclosed numberless mills, with hundreds of thousands of spindles, representing millions of capital.

At the head of these industrial plants are men of ability and experience. And business has been successful and increasing.

The kindest relations exist between capital and labor, each in turn respecting the rights of the other, and harmony and good will prevails.

And now, you must excuse a few words which may seem personal. In looking over your body I see the representatives of large corporations and of private enterprises, all engaged in manufactures of some kind. The personel of this convention, as well as the discussions of the various questions that have come before it will compare favorably with any convention of a similar kind ever held.

In the amount of capital and in the number of industries represented this convention need not blush. It is preeminently the first.

It is with pleasure, then, gentlemen, that I again welcome you to this banquet. We are glad you are here; we would like to take each by the hand, and feel that if we met as strangers we will part as friends.

Col. J. T. Anthony, the first president of the Southern Cotton Spinners' Association, gave the toast, "Our Association." He said that he was proud of the opportunity to perform a duty so profoundly pleasant to hum. Asking pardon for personal reference, he said that prior to the organization of the present association a small group of men met together in the spring of 1897—a time well remembered as one of great financial depression—and sent out communications which resulted in the formation of the association in May, 1898, the honor of the presidency being given to him.

Col. Anthony stated that he was exceedingly gratified at the very evident growth of the Association. He said that in resigning the presidency he felt that he had shown much wisdom, his successors being men of great ability. He regretted that he had been unable to attend the previous meetings of the association during the present convention, but he was assured that great good had resulted from the eliberations of the spinners. Col. Anthony concluded his speech by urging the necessity of continued and strenuous industrial efforts; and he also emphasized the need for expansion, not only in sending goods away from home, but in the development of commerce in this country.

President McAden introduced Mr. R. H. Edmonds, Editor Manufacturers' Record, Baltimore, Md., who responded to the toast "The South's Interest in the Development of American Shipping."

Address of Richard H. Edmonds.

Exporting as the United States did in 1899 domestic products to the value of \$1,250,000,000, nearly one-third of this, or about \$400,000,000, originated in the Southern States. In addition to this the exports of Western products through Southern ports is ever increasing. With our industrial interests only at the beginning of their development, with less than one-third of the population of the country, and yet providing \$400,000,000 of the total of America's export trade, it well becomes the South to look closely into the importance of developing our merchant marine. Of the vast freight represented in these exports of \$1,250,000,000, vessels flying the American flag carried but \$85,000,000. Great as our country is, standing at the close of the nineteenth century as the central figure in the world's affairs, holding a dominating position alike in the world's political and industrial interests, we are yet dependent upon foreign vessels for handling more than 90 per cent. of our exports. As American citizens we may well consider the necessity of how to reverse this condition, and we of the South are more deeply concerned in the solution than the people of any other section. For the time is coming when more than one-half of America's exports will pass through Southern ports.

If I bring to your attention to-night some facts from the

historical side of the South's effort in behalf of America's merchant marine, presenting the broad view of the antebellum South on this question, it will be but to show that the men of to-day who are giving their attention to policies looking to the upbuilding of our commercial interests are but reviving the work which the leaders of the South of fifty years ago were vigorously pressing. In recalling the efforts so persistently made half a century ago by the South's great leaders, we may do honor to their memory and find greater inspiration for the work which is now turning their dreams, so sadly interrupted by the war into substantial realities.

Sixty years ago the South had reached the point where it was a constantly increasing contributor to America's foreign trade, which was at that time so greatly enriching other parts of our country. Already the South had sent the first steamship which had ever crossed the Atlantic. Earnest men, like Stephen Elliott, of South Carolina, had projected steam railroad lines connecting the Southern seaboard cities with what was then the undeveloped West, and two or three conventions had been held in the cotton States for the purpose of arousing an interest in other lines than agriculture dominated by cotton growing. By 1845 conventions designed to build up industry and commerce began to meet more frequently, and in the fifties they were held every year. Unfortunately for the South, these later conventions became for the most part arenas for the discussions of questions which afterward separated the sections.

A convention of Southern and Western merchants in Augusta in 1838 recommended a speedy adoption of measures for the introduction of commercial education among the youth, so that there might be established "a body of merchants whose entire interest and feeling would be centered in the country which had reared and sustained them." A step in this direction, which was probably the first plan for a professorship of commerce in this country, was drawn by James D. B. De Bow for the University of Louisiana, under an endowment by Col. Maunsel White. In this plan he designated the chair as a professorship of public economy, commerce and statistics, and included in it the application of statistics to commerce, agriculture and manufactures.

At the Memphis convention of 1845, over which John C. Calhoun presided, resolutions were adopted in favor of the improvement of the navigation of the Ohio and Mississippi rivers as objects strictly national, of connecting the Mississippi river with the Northern lakes by a ship canal, of the prompt extension by the government of the telegraph into or through the valley of the Mississippi, of aid by Congress by grants of land for the construction of railroads projected through the public domain, and of a dry dock for repairs and refitting of government vessels at some suitable point on the Gulf of Mexico. The convention took the ground that the railroads and other means of communication between the Mississippi valley and the South Atlantic ports would give "greater facilities to trade, greater dispatch in traveling and in developing new sources of wealth," and would have a salutary influence, commercial, social and political.

In 1851 William N. Burwell made a report to the Virginia convention recommending an appeal to Congress to bestow upon a line of mail steamers between Hampton-Roads and European ports "the same mail facilities which are extended to Northern lines."

The Memphis convention of 1853 regarded the establishment of direct communication by steam between Southern ports and Europe, and the encouragement and protection of this system by the national government, connecting therewith ample mail facilities, as an essential feature in the commercial independence of the South and West.

The Charleston convention of 1854 urged Congress to encourage establishment of mail steamers between Southern ports, Brazil and Europe, and also for the improvement of

the merchant service by encouraging boys to go to sea, and recommend that the Southern States lend their aid by exempting from taxes for a limited time the goods directly imported into them, or by allowing the importers an equivalent drawback or bounty.

In 1856 R. G. Morris brought out at the Richmond convention that a Richmond firm had been awarded the contract for the engines for two government ocean steamers, having satisfied the government, which had invited proposals from all quarters, that "they had made the best offer for these immense engines, both as it regarded cheapness and construction."

It was probably due to the effect of these conventions and to the general discussions following their work that the Legislature of Louisiana passed an act granting a bonus of \$5 a ton for every vessel of more than 100 tons burden which should be built in the State, while the Alabama Legislature passed a similar act granting \$4 a ton for every steamer, and exempting from every description of State, county or municipal taxation the sale of all goods imported into the State directly from foreign countries.

At Charleston in 1851 the stock necessary for the organization of the Atlantic Steam Navigation Company was promptly subscribed.

At that time the Southern States were most liberal in their aid to railroad building with a view to developing trade. A notable example of the general tendency was apparent in the message of Governor Manning, of South Carolina, to the Legislature of 1852–53, recommending a subscription by the State of \$1,000,000 to the Blue Ridge road, projected from Anderson to Cincinnati, on the ground that this would secure for Charleston a gigantic foreign commerce.

Prominent in all these movements, either as a personal participant or as a vigorous writer, was De Bow, the founder of the "Commercial Review of the South," which for fifteen years before the war was the exponent and chronicler of the South's commercial and industrial undertakings. His speeches were many, but in none of them was a more striking sentence than in his address at Nashville in 1851, when speaking for railroad construction and State aid to railroads, he said : "God may have given you coal and iron sufficient to work the spindles and navies of the world, but they will sleep in your everlasting hills until the trumpet of Gabriel shall sound unless you can do something better than build turnpikes."

Stimulated by such leaders as De Bow and others, railroad building was slowly pushed, with lines gradually reaching from the seaboard towards the interior, others connecting interior towns, the prevailing idea being to establish great systems connecting Southern ports with the productive inland markets in order to enlarge both the export and import movement through Southern ports.

An address calling for a railroad convention of Southern and Western States to meet at New Orleans in 1852 is a splendid summary of the spirit prevailing among the progressive men of that day. A few extracts will indicate their sentiment. Referring to railroads, it said :

"Is there any necessary reason that the whole commercial strength of the nation should concentrate in the cities of the North, whilst New Orleans, Mobile, Charleston and Savannah are arrested in their progress, or exhibit at times even the evidences of decay?"

"Whilst we have been idle spectators, New York and Boston have been taking away the commerce of the rich and growing States of the Northwest, which once paid tribute to us as it passed to the ocean, but which now avoids our limits and refuses its former wealth. Are the millions of the Northwest more naturally allied to those of the North than to us, who occupy a part of the same great valley and are nearer of approach, and must we forever abandon the idea of controlling or of sharing their commerce ?"

"What then must be done for New Orleans? She must by a wise and liberal stroke of policy regain a part, if not the whole of the trade she has supinely lost and open new sources of opulence and power, which are abundant all around her. She can do this by changing and modifying her laws bearing unequally or hardly upon capital and enterprise, by cheapening her system of government, by affording greater facilities and presenting less restrictions to commerce, by establishing manufactures, opening new steamship lines to Europe and conducting a foreign import trade, and finally, and what is of first importance and should precede every other effort, by munificent appropriations to railroads branching to the West and to the North and the East from a terminus at her center or from termini on such interior streams and rivers which are necessarily tributary to her. Now is the accepted time for action. To-morrow will be too late."

The wide grasp of the situation is further demonstrated by the recommendation of the convention that there be constructed "the Southwestern National Railroad from Washington city to New Orleans, passing through the States of Virginia, Tennessee, Alabama, Mississippi and Louisiana, constituting the shortest practicable line of mail and travel transit, and consisting of the following continuous sections now under construction, to-wit, the Richmond & Lynchburg Railroad, the Virginia & Tennessee road, the Georgia & Alabama road, the Alabama & Tennessee River road, the Selma & Jackson road, the New Orleans & Jackson road," and that "a railway and water communication across the Isthmus of Tehauntepec is of national importance, especially so to the whole Southwest."

Underlying many of the plans of that day was the conviction that the future of the South in this direction was assured by the fact that cotton and its manufactures had given the great impulse to commerce in the early part of this century, and there is quite a familiar sound in the statement made in the report of the legislature of Alabama about 1838, that it cost Alabama \$1,800,000 to get its cotton to European markets, and another \$1,800,000 to get to Alabama the imports in exchange, and the question is asked, "If this amount must be paid, why should it not be paid to our own citizens?"

In the report made by Robert Y. Hayne at one of the earliest Southern commercial conventions at Charleston in 1839 it was said that while the Southern and Southwestern States were producing nearly three-quarters of the domestic exports of the Union, they imported scarcely one-tenth of the merchandise received in exchange, and that foreign commerce was causing cities of other States to flourish while Southern cities were falling into decay.

Bearing particularly upon the relation of cotton manufacturing to commercial expansion were portions of a pamphlet published originally in a series of communications to the Charleston Courier in 1845. Its author, William Gregg, was a pioneer in cotton mill building in South Carolina, and his pamphlet, based upon experience, observation and judgment, was an argument for the support of industrial and shipping undertakings. Taking Newburyport, Mass., as an illustration of the benefit of industrial interests and shipping facilities in overcoming a threatened decay of the town, he said : "The wharves are now crowded with shipping, the sound of the hammer is heard in every direction, new houses are being erected and old ones have been remodeled, real estate has not only advanced to its original value, but doubled and quadrupled it, and so it would be with Charleston, Augusta, Columbia and other places at the South." Suggesting that the spinning of cotton yarn might be profitably undertaken by the South, he said : "And there is no good reason why the name of some of our large planters should not be seen on bales of yarn making their way to Europe to supply the markets that are now monopolized by the English spinners. England has for many years been sending millions of dollars' worth of this article to the Continent. Since 1832 she has exported to that part of the world from \$16,000,000 to \$25,-000,000 worth per annum. And what is to prevent us in Carolina from setting up a claim to a portion of this trade? Are we afraid of Northern competition in this, the simplest of all kinds of manufacture? The South has never failed to supplant the North in this branch of manufactures whereever the attempt has been made. As we begin to have some practical experience in manufacturing at the South we can now see what an absurdity it would be for us to pack up our cotton and send it to England to be returned as osnaburgs taxed from \$60 to \$80 per bale, as was the case formerly, when the same can be converted into cloth in the immediate neighborhood of the place in which it grew for one-fourth of the sum. It is equally as absurd in us to send our raw cotton to Europe to be spun into yarn, adding \$40 to \$50 to the value of a bale, which yields the planter of the interior, after paying the expense of transportation, from \$12 to \$15 only."

In 1852 J. G. Gamble, in a letter urging the erection in every county in the cotton States of factories to commence with spinning, and afterwards to enter upon the weaving of cloth, wrote :

"Our Southern factories w 'd obtain the raw material at least 20 per cent. chea _ than those of England, and Southern yarn and cloth would monopolize both the foreign and the home market. Let each county commence with a factory o 1,000 spindles, and let the planters agree to invest annually 10 per cent. of their crops in the extension of such factories, and in a few years they would manufacture the whole crop of the country and export it in the shape of yarn and cloth. Such a course would double the value of our exports, and would add to the prosperity of the country more than the gold mines of California twice told. Its effect upon the banking institutions and commercial interests of the country cannot be sufficiently estimated."

Again, the contention was made that a given number of spindles could be put in operation in Georgia for much less cost than a like number could be put in operation in any of the Northern States, because of the difference in the value of land, water-power and buildings, and that they could be kept in operation for much less because of the difference in the price of labor, provisions, clothing and fuel, aud that this advantage would necessarily give the State a leadership in the markets of the whole world, so that ultimately these factories would supply not only the local demand, but that of foreign markets. And he expected the commerce of India and China to reach the Atlantic through Georgia. He had in mind transportation across the country, and urged Georgia to diversify both its crops and its manufacture, so as to make the profits of transportation and retransportation.

At that time public opinion was divided between a railroad from the Mississippi to the Pacific, which was to be built for the full development of the territory of the United States, and the route across the Isthmus either by rail or water. It is interesting to note in this connection T. Butler King's report on the proposed Panama Railroad, in which he furnished a comparison of the routes to the Pacific ports by way of Cape Horn and the Isthmus of Panama from Liverpool to New York, and pointed out as one of the great causes of British commercial supremacy that "she not only has the ports of the Continent of Europe as her neighbors, but she is 1,500 miles, or two weeks, nearer than we are to all the other ports of the world, except the Atlantic ports of the American continent north of the equator and of the West Indies." This report was quoted in an argument in favor of a railroad or canal across the Isthmus. Of special importance in connection with this suggestion was mentioned the lessening of the distance to the

Asiatic, Polynesian and other Pacific markets. The figures of population of the Sandwich Islands, Sumatra, Borneo, India, the Philippines and China were given, and the question was asked :

"Can it be imagined that these vast regions, so densely populated, have already reached the acme of their foreign trade, or is it not plausible, when better systems of intercourse are opened, jealousies removed and civilzation extended, that trade with them will be augmented two or three-fold, reaching, perhaps, in the aggregate, \$5,000,000 to \$8,000,000? Instead of 2,000 travelers visiting the East per annum, in such a contingency, would not the number reach nearer 20,000, which, at half the present rates of travel, would realize \$6,000,000 or \$8,000,000?"

These figures seemed large in that day, but in comparison with what is already being done in the development of trade with the Orient they are insignificant. They do, however, show that the spirit which prevails to-day of determination on the part of the cotton manufacturers and business men generally of the South to take and hold a dominating position in the development of Oriental trade is but a revival of the spirit of the Old South.

In the Memphus convention of 1849 the construction of a national railroad from the Mississippi to the Pacific ocean, and also the construction of branch roads connecting the main trunk line with the Northern lakes, the Mississippi river and the Gulf of Mexico, were advocated. The convention also favored the construction of a railroad across the Isthmus to facilitate trade while the national road was under way.

Any review of Southern aspirations of fifty years ago would be incomplete, however hasty, without a reference to the inspiring work of Matthew F. Maury, of Virginia. He was not ony the great tracer of the paths of the sea, but during twenty years a persistent advocate of measures by which new paths for American trade could be opened and the rela-

tion of the South to that trade be readjusted. By word of mouth, in letters, reports and contributions to periodical literature, he kept to the front the material question, enlightening his arguments with the results of scientific attainment, personal experience and the foresight of statesmanship. About 1837 a strong effort had been made to obtain from the Virginia legislature a charter for the Atlantic Steam Navigation Company. The promoters proposed to make Norfolk the terminus of the line, provided the South should take a part of the stock. Maury was acquainted with it, and realized its potentialities. Discussing it ten or fifteen years later, he wrote :

"Had the legislature of Virginia created that ocean steam navigation charter Norfolk would at this day have been the center of steamship enterprise for the United States.

"The French steamers would have been built there; they would have been commanded and controlled by Americans.

"This would have established foundries, machine shops and ship yards at Norfolk, and have placed her ten or fifteen years ahead of New York in the steamship business. Norfolk would have been enabled to get the contracts from the government for establishing those lines of splendid steamers that are now giving such a tremendous impetus to the trade, business, travel and traffic of New York. The lines of the Isthmus would have belonged to Norfolk. Hers would probably have been the Havre and Bremen lines, and the Old Dominion might have claimed also what is now the Collins Line."

Lieutenant Maury then told the reasons for the shifting of direct trade from Southern ports to New York as improvements in navigation were made, but expressed the hope that before 1857 he would see the Isthmus pierced with commercial thoroughfares, great national highways across America and the South, regaining in tenfold measure its foreign commerce, its direct trade, its importing business and commercial prosperity. In discussing this he said :

"From the Gulf of Mexico all the great commercial markets of the world are downhill. A vessel bound from the Gulf to Europe places herself in the current of the Gulf Stream and drifts along with it at the rate, for part of the way, of 80 or 100 miles a day. If her destination be Rio, or India, or California, her course is the same as far north as the Island of Bermuda.

"And when there shall be established a commercial thoroughfare across the Isthmus the trade winds of the Pacific will place China, India and all the islands of that ocean downhill also from this sea of ours. In that case the whole of Europe must pass by our very doors on the great highway to the markets both of the East and West Indies."

Again and again he reverted to the part to be played by the South in the expansion of American trade through the union of the Atlantic and Pacific, and one of the most comprehensive papers was devoted to a survey of the possibilities of the Gulf of Mexico and the Caribbean Sea, which he called the Mediterranean of the West, to be developed by the Isthmian connection. In a most graphic manner he sketched the tremendous importance of the valleys of the Mississippi and the Amazon as contributors to the commerce of the Gulf ; he showed that the energies of the United States were so great that they required a highway across the Isthmus to give them full scope and play, and in conclusion said :

"From all this we are led to the conclusion that the time is rapidly approaching, if it has not already arrived, when the Atlantic and Pacific must join hands across the Isthmus. We have shown that there is no sea in the world which is possessed of such importance as this Southern sea of ours; that, with its succession of harvests, there is from some one or other of its river basins a crop always on the way to market; that it has for back country a continent at the

north and another at the south, and a world both to the east and to the west. We have shown how it is contiguous. to the two first and convenient to them all. The three great outlets of commerce, the delta of the Mississippi, the mouths of the Hudson and the Amazon, are all within 2,000 miles, ten days' sail, of Darien. It is a barrier that separates us from the markets of 600,000,000 peoplethree-fourths of the population of the earth. Break it down, therefore, and this country is placed midway between Europe and Asia; this sea becomes the center of the world and the focus of the world's commerce. This is a highway that will give vent to commerce, scope to energy and range to enterprise, which in a few years hence will make gay with steam and canvas parts of the ocean that are now unfrequented and almost unknown. Old channels of trade will be broken up and new ones opened. We desire to see our own country the standard bearer in this great work."

Another dream of Maury's was the plan of giving to Norfolk or the Hampton Roads basin direct communication with European ports. The idea of the French promoters of 1837 was revived about 1850, and a bill was introduced into Congress to charter a steamship line between Virginia and Antwerp. An argument advanced in its favor was that nearly all the mails of continental Europe passed through England and on to New York ; that the direction of trade ever follows the line of postal communication, and for that reason mainly trade between America and Europe centered at New York. Should direct communication by steamers be established between Norfolk and Antwerp, Norfolk would at once secure the portion of continental mails which passed through Belgium, embracing a population of more than 100,000,000 and sweeping over a territory containing some of the finest agricultural and manfacturing districts of Europe. When this was done trade would necessarily follow, and Virginia's seaport, being the center of commercial intelligence, would become a center of commerce. A few years later a distinguished Frenchman was planning to arrange a line of steamships from the James river to ports in France. He was acting for the Franco-American Trans-Atlantic Navigation Company, which it was claimed had a capital of 18,000,000 francs, eight steamers of 2,000 to 2,500 tons, with a line already operating to Rio, New York and New Orleans.

In the same period is found the convention at Bristol, Va., appointing Hon. Ballard Preston, formerly Secretary of the Navy, to visit Europe for the purpose of setting forth the financial and industrial condition of Virginia and the advantages to follow the establishment of direct trade connections, with special "reference to the speedy establishment of a suitable line of steamers between the waters of Virginia and Europe." Mr. Preston was requested also to report whether or not the vessels of the company owning the Great Eastern were likely to promote the objects of the The Great Eastern, then in course of buildconvention. ing, was one of the factors involved in the crusade of Ambrose Dudley Mann, a native of Hanover county, Virginia, who had served abroad in commercial diplomacy, and who resigned from office to devote himself to the upbuilding of Southern trade. In August, 1856, he sent an address to the South proposing the establishment of a of a weekly line of steamers of 20,000 tons capacity between Milford Haven, 120 miles southwest of Liverpool, and the Chesapeake Bay. The plan commended itself to the Southern Commercial Convention, which met at Savannah that year, and in September of the following year a convention at Old Point Comfort, over with ex-Presidents Tyler presided, endorsed it. Those in attendance at the convention showed their practical faith in the undertaking by subscriptions to stock. By March 15, 1858, the number of shareholders had grown to several hundred, when the assembly of Virginia incorporated it as the Atlantic Steam Ferry Co., with permission to have a capital amounting to \$50,000,000. Maury saw the immense possibilities in the plan. He wrote a letter dwelling upon the resources for foreign trade of the States behind Virginia and alluding to the near completion of the Covington & Ohio Railway, giving, with the Blue Ridge road and the central connection between the seaboard and the Ohio, said it was "the most direct and favorable route that commerce can possibly have between Western Europe and our West," and added : "In calling the attention of English capitalists to the great physical and natural resources of this part of the country, and in presenting for their consideration your rapidly drawn sketches of its production and present value, I hope you will be able to give them assurances that the Covington & Ohio Railway is to be pushed forward vigorously to completion, and that by the time they can get their ships ready this work will also be ready to fetch and carry for them."

In advocating the organization of this company Mann gave a most comprehensive outline of the tendency towards railroad construction and extension as a means to convey for transportation to foreign countries the cotton of the Carolinas, Georgia, Tennessee, Alabama, Mississippi, Louisiana, Arkausas, Florida and Texas ; the tobacco, wheat and corn of Virginia, Tennessee, Maryland and Delaware; the pork and bacon and lard and tobacco of Kentucky and Missouri; the rice of South Carolina, and the resin and turpentine of the Carolinas. Quoting the estimate of expert judges, he said : "There is a sufficiency of iron and coal in Virginia, Tennessee and Kentucky to supply the wants of the Union for 100 centuries, while copper, lead, gypsum and salt exist in one or more of those States in immense quantities." And outlining the possibilities of freight from the South for foreign export, he said : "Steam or some motive power not yet discovered will be employed henceforth for propelling vessels in commerce or for belligerent purposes." His proposition looked to the organization of

a company to start with four vessels of the type and size of the Great Eastern, then under construction, claiming that "the number of such vessels required for the weekly ferry service would inspire the utmost respect for the American flag on the Atlantic," and that "from the military point of view four such steamships as the Great Eastern would be of inestimable advantage to the United States if they should ever be needed for active service." These vessels, according to his view, in times of peace would be practical naval schools for the attainment of knowledge of steam engineering. The amount of money required to transform the navy from sail to steam was too great to be to be undertaken, and, therefore, he added : "To obviate this and to render at the same time our position secure we must construct vessels, both for the Atlantic and the Pacific, which, while they will carry the olive branch of commerce in one hand, will carry in the other the sheathed sword."

These propositions represented the views of the leaders of the South of forty and fifty years ago. They were not idle dreams; they were broad conceptions born of a comprehensive grasp of the situation and a desire to give the South its proper place in the commerce and industry of the country. They were enthusiastically endorsed and supported by the foremost business men of that day. They failed of accomplishment solely, I believe, because of the intervention of the war between the States, which made impossible the carrying out of such undertakings.

My purpose in bringing to your attention the actions of these conventions and the plans of the great leaders of the old South is to show that what the South is now doing along the same line is but the fulfillment of the plans made and pushed with such vigor half a century ago; that the spirit now dominating the progressive South is no new thing, but simply the spirit of the old South revived, and with new life and new vigor, because through the economic changes wrought by the war and in spite of the terrible

strain of that struggle, we are given larger opportunity for development and for taking a commanding position in the world's affairs. Stimulated by a study of what the old South so broadly planned looking to the development of its shipping and commercial interests, we may well press forward with renewed energy, determined that the South shall take its rightful place in helping to create for the United States a shipping interest commensurate with our position as the richest nation of earth. Originating, as the South is already doing, about \$400,000,000 worth of foreign exports a year, shipped almost exclusively in vessels that fly the British, German and other foreign flags, the South may well be deeply concerned for the upbuilding of a merchant marine because of the magnitude of its present export trade. But what the South is to-day doing in furnishing nearly one-third of the total exports of America is but a faint indication of the magnitude of the trade which will be developed within the next ten or twenty years. Many gathered here to-night will live to see the exports from Southern ports exceed in volume the total export trade of the United States at present.

To-day the South produces on an average 10,000,000 to 11,000,000 bales of cotton, representing, including the cotton seed, a valuation of from \$350,000,000 to \$400,000,000. This enormous crop is produced on 5 per cent. of the total area of the cotton region. Of the entire cotton growing territory of the South, only 20 per cent. is now in improved land. It is possible, with new land added to the cotton area and with more scientific cultivation, to increase our cotton production to 100,000,000 bales. It will be many years before we can conceive of the production of such a crop, but there is every probability that within the next twenty years the world will be demanding of the South at least 20,000,000 to 25,000,000 bales, and that the South will produce it with as much ease as it is to-day producing its 10,000,000 bales.

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The mining of phosphate rock, which forms such an important element in the foreign trade of the South, now aggregates at least 2,000,000 tons a year, and this can be doubled and quadrupled for many years to come, but this generation is not likely to see the exhaustion of the supply which the South can add to the world's commerce in phosphate.

In naval stores the South holds a monopoly, and of standing timber it has one-half of the total supply of the United States. Mr. B. E. Fernow, the distinguished timber expert, says : "In the South lies the key to the situation of the future lumber market, and according to the manner in which what is left to her of her enormous timber wealth will be managed and exploited she may or may not control the lumber market forever."

The iron and coal interests of the South, which were making fair progress before the war, were practically swept out of existence, so far as actual work was concerned, by the results of that struggle. When the war had ended the South was too poor to take up this industry, and the iron and coal business had been concentrated in the North. Gradually, as the disorganization which followed the war gave way to law and order, the work of development commenced. Birmingham led the way and demonstrated to the world, first, that the South could make iron at a profit; then that the South could ship iron to the North at a profit, and next-most startling in its world-wide influence-that the South could export iron to Europe at a profit. It was scarcely five years ago when the first foreign shipment of Southern iron was made from Birmingham. It was only 250 tons, and was wholly an experiment. The man who made it was a Southern man. Out of that experimental shipment there developed a trade the importance of which can be appreciated by the simple statement that last week Birmingham sold 50,000 tons of iron for export. The success of the South in exporting pig-iron and the demonstration of its ability to produce iron at a lower cost than any

other section of the world have marked the beginning of a revolution in the world's trade, the extent of which we cannot now grasp. For many years it has been an accepted axiom that "that country or that section of any country which can produce and market iron at the lowest cost will dominate and control the commerce of the world." That the South is able to produce and market iron at a lower cost than any other section is now universally admitted in America, as well as in Europe. But when we add to the South's rapidly developing power in the iron and steel interests of the world its equally strong position in cotton and cotton goods, we find a situation which has no parallel elsewhere. England's vast shipping interests, owning, as that country does, one-half of the steamship tonnage of the world, have been based on her coal and iron and the manufacture of cotton goods. These three great interests created the financial strength and dominating influence of Great Britain. To-day, the South is pressing its iron and steel interests into all foreign markets in competition with Great Britain; it is exporting its cotton goods and it cotton seed products in competition with the world; its timber is furnishing an immense foreign export business, and of coal, of which it has a far greater supply than all Europe combined, it is already producing 45,000,000 tons a year, or 3,000,000 tons more than the total output of the United States in 1880. Just twenty years ago the total output of bituminous coal in the United States was 41,000,000 tons. Last year it was is 198,000,000. The South's coal production last year was 45,000,000 tons, and there is no good reason why the rate of growth in the coal production of the South during the next twenty years should not be at least equal to the rate of growth in the United States during the last twenty years. Should this prove true, twenty years from now the South will be mining and marketing 200,000,000 tons of coal. But for the fact that we have seen the coal trade of the United States grow from 40,000,000

to 198,000,000 tons in twenty years, such an increase would seem impossible. In 1879 the total pig-iron production of the United States was 2,700,000 tons. This year the South's production will be about 2,750,000 to 3,000,000 tons. Thus we are mining more coal and producing more pig-iron than the United States mined of the one and produced of the other twenty years ago.

Of raw material produced in the South alone we exported last year of cotton \$191,000,000 worth, notwithstanding the fact of a great decline during that calendar year because of the short purchases of foreign buyers; of cotton oil \$12,-000,000, of cotton seed cake and meal \$10,000,000, of phosphates \$7,500,000, of naval stores \$11,000,000, or \$231,-500,000 worth in all. Of products which it has in common with the country at large its exports for the year may be estimated as follows: Mineral oil \$25,000,000, tobacco \$30,000,000, lumber and timber \$17,000,000, pig-iron \$3,-000,000, cotton goods \$14,000,000, live-stock \$10,000,000 coal \$5,000,000-a total of \$104,000,000. To this should be added the South's share in the exports of fruit, of manufactures of iron, steel and wood, of grain, of hides and leather, and of provisions, amounting to not less than \$40,-000,000, or an aggregate of over \$375,000,000.

Twenty years ago the capital invested in manufacturing in the United States was \$2,700,000,000. Ten years ago, or in 1890, it had reached the astounding figures of \$6,500,-000,000, and to-day it is probably upwards of \$10,000,000,-000. Even now we so far out rank any other country on earth in the magnitude of our industrial capital that what the future has in store for us can scarcely be comprehended. The time is rapidly approaching when the export trade of the United States will be double the export trade of all Europe, and the South's proportion will every year steadily enlarge.

What Maury termed the downhill tendency of a great portion of the outward movement of the country's trade,

checked when New York, by its canal and railroad, as he phrased it, turned the Mississippi valley upside down, has been renewed and accelerated, as line after line of railroad has been constructed or formed by consolidating minor lines, until from the capes of the Chesapeake to the Rio Grande are magnificent harbors, connected by steel-bound arteries with those portions of the country which must ultimately furnish the bulk of American commerce. Stephen Elliott's hope has been more than fulfilled; the suggested line from New Orleans to Washington, as proposed in 1852, is a fact, and while its organization may not have been effected on the identical lines proposed, it follows to a wonderful degree the original direction. There is no canal across Florida, as was then proposed, but at Tampa is a railroad terminus pointing in one direction to Cuba and Latin America and in the other to the narrow strip of land still separating the Atlantic and the Pacific waters and retarding the growth of a line of Gulf ports which in time must become more opulent than the cities of the Mediterranean. The Covington & Ohio, the Blue Ridge and the Central railroads, formed for the purpose of connecting the Ohio valley with Hampton Roads, are now one line, and have met the proposed steam ferry line to Europe. In 1856 an intention to establish such a swift steamship line from a Southern port was regarded in some quarters as a deliberate attempt to weaken the solidarity of the Union. To-day, the union of Norfolk and Newport News with the country beyond the Alleghanies; of Charleston and Savannah with the central South and West; of Jacksonville, Pensacola and Mobile with the timber, iron and phosphate regions of the South; of New Orleans with Chicago and the Dakotas beyond; of Port Arthur and Sabine Pass with Kansas City, the center of great grain and cattle trade, and of Galveston with the farther West, presents the spectacle of Northern, Southern, Western and foreign capital working together for the advancement of Southern commerce.

To make this advancement sure other projects must be carried out. The Isthinian canal must be constructed, the American merchant marine must be expanded, and the American navy must be in a position to make unnecessary, and, indeed, impossible, any warfare which otherwise might be resorted to as a means of checking America's commercial extension. That such a country as the United States, with such abounding wealth and with such a future, should be spending, as we are now doing, \$200,000,000 a year in paying the vessels of other nations to carry our exports to market and to further our exchange of products seems to me to be an unanswerable argument for the support of our own merchant marine and for measures intended to overcome the advantages as shipbuilders and ship owners which other nations now possess. The South has a peculiar interest in such measures, for the South already possesses at Newport News a shipbuilding plant representing a cash investment of \$12,000,000 and giving employment to 6,000 hands, and at Richmond a \$2,000,000 shipbuilding company, with 1,200 employes, demonstrating that Richmond cannot only build engines for government vessels, as in 1856, but can also compete successfully with older plants for the construction of war vessels themselves; while the dry-dock at Algiers, fulfilling the recommendation of 1845, must ultimately be followed by shipbuilding interests there. Even now English shipbuilders are figuring on the feasibility of establishing a great shipbuilding plant at some point on the Gulf.

There may be some slight difference between the aid given by individual States or individual cities to secure the construction of railroads, as was so generally done in the past, and, as we all admit, to the great profit of the country, as compared with the aid given by the general government to the development of shipping interests, which would benefit the commerce of the South with that of the whole country, but the difference, if any, is one of degree and not of kind. The plea advanced in 1838, that if Alabama must pay \$3,600,000 a year to exchange its cotton for European products or money it should be paid to Alabama people, may readily be paraphrased into the simple statement that if this country pays more than \$200,000,000 to get its goods to market, the money should be paid to citizens of America, and especially when this \$200,000,000 must in the near future be doubled and quadrupled by the growth of our foreign trade.

We are building what we regard as a great navy, but contrasted with the navies of the countries which we must meet in world competition it is still small, and few believe that the expenditures will be rapid enough to meet the demands of international relations, changed, enlarged and complicated as an outcome of the Spanish-American war, and of our new position as a dominating factor in the world's commerce. The Spanish-American war was but an incident which brought prominently to the front our new position. What has forced us into the world's affairs is not so much the Spanish-American war as the revolution in our foreign trade conditions. It was but a few years ago when the United States was the dumping-ground for the surplus iron and steel products of Europe, while to-day we are dominating the world in iron and steel, and already are exporting upwards of \$100,000,000 a year of iron and steel products. It is a fair statement to say that when the world has readjusted itself to the present higher prices of iron and steel, or when we in this country have caught up with the phenomenal demand of the last twelve months and are again ready to vigorously push into the foreign market, that there will not be an iron bridge or a railroad constructed on the face of the earth for which America will not directly or indirectly set the price. The control of the iron and steel industries of the world has already passed into American hands.

It is difficult to grasp the full meaning of this, and still

more difficult to attempt to soberly portray its influence upon our own country, as well as upon others. Great Britain's supremacy in the world's affairs, its great financial power and its vast shipping interests are largely due to its iron, steel and coal interests. Upon them it founded its commercial empire-the greatest that has ever been known. Its ability to produce iron and steel at less cost than any other country gave to Great Britain the power to develop its iron, ship-building and ship-owning interests, and to supply the demands of every country for machinery and of manufactured goods. Without its coal and iron it could not have become the dominating power in the trade and commerce of the world. And now the scepter of its power has departed. We are making nearly double as much iron and steel as Great Britain, and making it at a price that will soon defy competition. We are not only turning out the raw product, but with astonishing rapidity we are pushing our steel rails, our locomotives, our iron and woodworking machinery into all countries, and now with such help from the national government as first enabled us to develop the making of pig-iron and of steel rails, we should be able to duplicate in shipbuilding our phenomenal record in other branches of metallurgical development.

Among the nations of the earth, in its resources, in its facilities for their development and in its advantages for commerce, the United States stands pre-eminent and alone.

With Europe on one side and Asia on the other, with resources many times greater for the development of manufactures and the creation of wealth than all of Europe combined, with a coast line of thousands of miles on the Atlantic and the Pacific, a strong, virile, homogeneous population of nearly 80,000,000 people, unvexed by the arbitrary regulations of a dozen different governments and different laws and different languages, the United States stands to-day just at the threshhold of its career, and justly commands the wonder of the world.

A study of business conditions indicates that our country has entered upon a period of great activity and expansion that will probably be without parallel in our history. We have laid a solid foundation for expansion at home and abroad. Our manufactures have been steadily forcing their way into every foreign market; our industrial interests are on a solid basis of economic production that enables us to meet the world's prices on finished products as widely diverse as cotton goods and locomotives. The recent war gave a broadness of view in world affairs which has been an inspiration to business activities, which has quickened our people with a spirit of commercial dominance. No man living has ever seen such a period of advancement as we have entered upon. What the discovery and settlement of America were to the Old World four centuries ago the conditions in Cuba, Porto Rica, the Philippines, Asia and Africa will be to America, magnified as many times as present civilization and commercial facilities exceed those of that period. "A new world is rounding into form." Our land is to be the quickening, energizing influence to advance trade, extend civilization and spread the gospel of freedom. Just as we have entered the political world with a power and influence that have startled Europe, so are we preparing to enter the world of trade and commerce. Since 1865 we have been busy developing an empire at home and laying broad foundations for an industrial structure commensurate with our unmatched resources and energy.

With Asia and Africa being opened up to advancing civilization, to the building of railroads, the development of industrial interests, the utilization of modern improvements; with Cuba and the Philippine Islands as fertile fields for trade expansion, for railroad, manufacturing and agricultural advancement; with the building of the Nicaraguan canal practically assured in the near future, we can see that the world is being prepared for an advance in civilization and in trade greater than ever before known in

the history of the human race. With all of these forces coming into play at a time we are fully able and ready to enter in and control a large share of the work and the wealth to be created, he is a bold man who would attempt to predict the wonderful progress of the United States during the next decade. And the South is to be the greatest gainer.

These are not idle dreams. A country which within twenty years can increase its manufacturing capital from less than \$3,000,000,000 or over \$10,000,000, that can increase its bituminous coal production in the same period from 41,000,000 to 198,000,000 tons, its pig-iron from less than 3,000,000 tons to nearly 15,000,000 tons, its cotton spindles from 10,000,000 to 18,000,0000, and which to-day, despite all of this phenomenal growth, is expanding more rapidly than ever before, is a country which may well challenge the world's attention. It becomes us, therefore, as citizens of this country, not only from national pride, but from sound business and economic reasons, and for safety, to lay aside all petty jealousies, whatever they may be, and unite in an effort to develop our shipping interests to a point commensurate with our progress in all other lines of human activities.

So far as the South is concerned, for fifty years, when unimpeded by the necessity of devoting all of its energies to mere existence, it was vitally interested in the commercial growth of the country and in the utilization of the shipping required for that commerce. I took a leading part in advocating the construction of the Isthmian canal, the development of steamsnip lines and the extension of trade with South America and Asia. And having taken up once more the upbuilding of its material interests, having its many ports between the Chesapeake Bay and the Rio Grade equipped with splendid terminal facilities and its railroad lines connecting with the far West, while its own products are seeking a foreign market, the South may again justly take the lead in seeking to revive American shipping interests.

At the conclusion of Mr. Edmonds' address-at 2:30 A. M.—there was great applause and the exceedingly goodhumored banqueters called for a number of prominent cot. ton spinners, who responded in brief, timely speeches. Among these were Mr. D. A. Tompkins, who emphasized with pleasurable significance the unity between the North and South; Mr. Theo. C. Search, who spoke of the wonderful industrial prosperity to be gained as a result of proper aggressiveness and expansion; Mr. R. S. Reinhardt, who spoke briefly and humorously. Mr. John Barrett, after paying a pretty compliment to Mr. D. A. Tompkins, again adverted to the necessity of keeping the American flag over the Philippine Islands and the concomitant importance of expansion. His words brought forth a tumult of applause. There is no room for doubt as to how the Southern Cotton Spinners' Association stands on the question of expansion and the open door policy in the East. At 3 o'clock this morning and afterwards the spinners yelled for Mr. Geo. Otis Draper, and a number of other representative men, who yielded to friendly clamor and spoke pithily and sensibly.

The last speaker was Mr. H. W. B. Glover, traffic manager of the Seaboard Air Line, who spoke in response to repeated calls. He said that he believed in expansion -that the Seaboard had typified by construction the practical principles of expansion.

The banquet ended at 3:20 this morning. In its length and interest it was altogether a fitting conclusion to the greatest convention of mill men ever held in the United States.

The reading of the following telegram by President Mc-Aden evoked much applause :

"Boston, Mass.

"Geo. B. Hiss, Secretary Southern Cotton Spinners' Association, Charlotte :

"The New England Cotton Manufacturers' Association send greetings with best wishes for a successful meeting and pleasant banquet. C. J. H. WOODBURY, Secretary."

Motion by R. B. Miller that we return thanks to the Seaboard Air Line for furnishing transportation to Lincolnton and return for the members and friends of this Association. Adopted.

Adjourned at 3:15 A. M.

SOUTHERN COTTON SPINNERS' ASSOCIATION.

Its Organization—Its Wonderful Growth of Membership—Officers Who Have Guided Its Affairs—The Object Sought in Forming the Association—The Advantages of Membership—The Advantage of this Association to the Southern Manufacturer and a Glimpse Into Its Future Operations.

For a number of years past there have existed in all portions of the United States or rather those portions of the United States where the manufacturing interests were of sufficient importance, organizations composed of the different manufacturing interests. These Associations have been formed and their existence kept intact from year to year for the purpose of bringing about friendly business intercourse between those engaged in the same kind of manufacturing; for instance, the iron manufacturing plants have their organization. The New England Cotton Manufacturers years ago formed the New England Cotton Manufacturers' Association, and the manufacturers of lumber or those engaged in preparing lumber for the market, have their organization, etc.

Doubtless years ago when the South was largely engaged in manufacturing, associations or organizations existed, but the war which brought about the destruction of the South's manufacturing industries, removed thereby the necessity of industrial organizations. With the renewed efforts that the South is putting forth from an industrial standpoint, awakens the necessity for the organization of associations which will gather together those who are engaged in kindred manufacturing. For the greater part those now engaged in the manufacture of iron or cotton in the South are of a different generation from those who engaged

in these indusiries forty or fifty years ago. Of course there are exceptions, there are people engaged in the manufacture of cotton to day whose families for several generations past have been engaged in the same industry, but these are the exceptions and form but small percentage of those engaged in the manufacture of cotton in the South to-day.

Many of those who have recently entered a cotton manufacturing life have taken up this industry with very little knowledge of the manufacturing ability required to profitably operate their plant. This situation has in a measure been brought about by the fact that the manufacture of cotton goods has been stated to be somewhat more profitable than some other manufacturing industries; hence the man who could command the capital, was willing to risk the venture, though he realized his lack of manufacturing ability, but felt that he could employ a capable superintendent who would look after the practical part and he operate the financial end. It can be safely stated that a large percentage of the mills in operation in the South to-day, and a large percentage of those that will be put into operation in the South in the future, have been organized and will be organized upon this basis. The practical man is essential to the successful operation of any kind of a manufacturing plant, but ordinarily speaking, the practical man has his mind fully taken up with proper execution of the orders which are given to him in the line of manufacture, and it is not supposed that he is at all times in a position to advise the financial end as to when and when not to buy cotton, as to when and when not to take orders for the goods that his plant manufactures. Consequently, as happens at various periods in the history of every kind of manufacturing, there comes periods of depression for which the practical man is not responsible, nor is the financial man responsible, but it is during such periods as these that the executive management of both the practical man and the financial man are put to a test. During these depressions it is known

to some that there are manufacturing plants which are able to continue to pay their dividends. The plants are, for the most part, operated by men who have a practical knowledge of the business in all its details. The man who manages the financial end is competent to take charge of the management of the mill in the practical part, but these men have been thoroughly schooled into their business long enough to anticipate that there must come times of depression when the profits in the business are not as large as that the earnings are neither paid out all together in dividends or expended in extensions. Both of these matters are attended to with proper wisdom and always a sufficient amount is set aside for surplus fund, out of which, if it is necessary, dividends could be paid until the period of depression is passed.

It was during one of these periods of depression which had its beginning with the failure of the Barring Bros. in England along in the early 90's, and which depression had continued from year to year with hardly, if any, improvement until the fall of '98, the thought was given, by some persons to the manufacturing of cotton goods in the South, and the circumstances surrounding these various cotton manufacturing plants, which elicited the facts depicted in Numbers of men were operating plants, this article. manufacturing cotton into yarn and cloth, who had little knowledge of the business themselves; it is true they were learning with each year, but of the practical details of cotton manufacturing, they knew little, but were dependent for this knowledge upon the practical man who was their superintendent. The depression continued, those who had not made proper provision for such a long seige of depression, were unable to compete with those who had, it was impossible to earn dividends, the cost of cotton, coupled with the cost of manufacture, exceeded in some instances the selling prices, so that the business had narrowed down until it was worse than "swapping dollars.",

This state of affairs, as is well known, did not apply only to the South, but it applied to the cotton manufacturing plants in New England as well.

This situation brought to the minds of a number of manufacturers the fact that "Necessity was the mother of invention," and in view of the fact that there were few of the more recent manufacturers of cotton goods who knew as many as five of their fellow manufacturers who were manufacturing goods similar to their own, there was little opportunity for them to gain knowledge of one another so that they might have the benefit of each other's knowledge and thereby improve the general knowledge of each other. Thus the situation existed in the fall of '96, when there was gathered together a number of manufacturers in the city of Atlanta, Ga., with an object in view of forming what was known at the time as "The Southern Textile Association." This association was formed, officers duly elected, but it seemed almost impossible to get the members of it to attend the meetings. In the early part of '97, two or three manufacturers, together with the senior editor of this paper, lately deceased, met by appointment and inaugurated plans for the formation of an association of Southern cotton manufacturers, having the idea in mind that the bringing together once or twice a year of the different officers of the various cotton manufacturing plants, would enable them to become acquainted with each other and to profit by such acquaintance in a business way as well as socially. The efforts of these gentlemen seemed to meet with very little encouragement, it being stated by those who were approached on the subject, that for some reason Southern manufacturers were very different from those in any other section, that they were, so to speak, somewhat shy of each other, and they really felt that while they were willing to give some information, it might be they would not receive an equal amount in return. Efforts had previously been made to organize such organizations, but had met with dismal fail-

It was cited that The Southern Textile Association, ures. which was still in existence, was unable to get a quorum together, and that while there was no question of doubt that such an organization would prove of benefit to those engaged in the manufacture of cotton goods in the South, that the road to travel in perfecting such an organization was strewn with all kinds of obstacles which would make the undertaking most hazardous and discouraging. It was pointed out that the mills were, for the greater part, unable to make both ends meet, that they were unable to stand any extra expense such as would be incurred in gathering at any one point and paying dues to keep up an organization, that there was naturally expense to be incurred in operating such an association, that the officers of the association in part would have to receive salaries, and that taking altogether, it was most impracticable to attempt to perfect an organization at that time. Notwithstanding all of these discouraging recommendations, earnest efforts were made to secure a good representation at a meeting which was called to be held in Charlotte, N. C., on the 15th day of May, 1897. To the surprise of a great many people, the efforts that were made brought together, on the 15th day of May, some sixty or seventy manufacturers of cotton yarns and cloth. At that meeting it was proposed, among other things, that the gentlemen present should become members of the Southern Textile Association. This idea was not encouraged, and before this body of manufacturers had adjourned, they had formed themselves into an association, had elected a President, Vice President, Sec'y. and Treas., and a Board of seven Governors, which officers consisted of the following: Col. J. T. Anthony, President, Charlotte, N. C.; A. P. Rhyne, V. P., Mt. Holly, N. C.; Geo. B. Hiss Sec'y. and Treas., Charlotte, N. C.; A. A. Shuford, Hickory, N. C.; P. M. Brown, Charlotte, N. C.; R. J. Stough, Davidson, N. C.; A. M. Price, Lincolnton, N. C.; R. S. Reinhardt, Lincolnton, N. C.; D. R. Julian, Salisbury, N. C.

These last named gentlemen, together with the vice president, forming a Board of Governors.

These gentlemen became the first officers of "The Southern Cotton Spinners' Association," which was the name given to the organization.

The membership fee was fixed at \$5.00, and the dues were to be 25c. per 1,000 spindles per annum. Thus a mill which had 5,000 spindles would pay \$1.25 per annum as dues. There was no arrangement made as regards to salary for any of the officers, and these entered into office without any salary arrangement, and from that day until this, there has never existed any salary arrangement for any of the officers of the association. The money received into the treasury was used for the purpose of spreading broadcast, as far as possible, the fact that the organization had been perfected and inviting the various officers of the cotton manufacturing plants of the South to become members of this organization.

For the first year the growth of the Association was not very encouraging; still it had been clearly demonstrated that such an organization was beneficial, and those who were members knew best the advantages they were receiving by virtue of their membership in such an organization.

In view of the limited membership and the necessary expenses incurred in keeping alive the organization, it was necessary to use some financial strategy to prevent the organization from creating a debt, but by the proper guidance of the officers of the association there has never been a financial obligation made but what was promptly met. On the 10th of June, 1897, The Southern Cotton Spinners' Association again met in Charlotte and after transacting the business before it, appointed a committee consisting of Col. J. T. Authony, Pres., Charlotte, N. C.; A. P. Rhyne, V. P.; R. S. Reindardt, P. M. Brown, A. M. Price and Geo. B. Hiss, to visit Philadelphia, and confer with the various members of the Northern Commission houses. This committee met in Philadelphia, June 30, '97, and at that time met by appointment about twenty members of the representative Cotton Varn Commission Houses of the city of Philadelphia. In this meeting it also developed that the Commission Merchants could see no benefit to be derived by an association such as had been formed, and were inclined to discourage the movement. Thus again, where the original promoters had imagined they would receive encouragement, they found it lacking. Nothing daunted, they returned South and reported the result of their visit and also asserted their determination to increase the membership of the Association. Frequent meetings of the Board of Governors were held, each member responding cheerfully to notices sent them for call meetings, and each one, be it borne in mind, bearing absolutely every dollar of the expense incurred in travelling from his home to the place of meeting, etc.

At the next Annual Meeting, which was held in the city of Charlotte on the 12th day of May, 1898, the following officers were elected:

D. A. Tompkins, Pres., Charlotte, N. C.; A. P. Rhyne, V. P., Mt. Holly, N. C.; Geo. B. Hiss, Sec'y. and Treas., Charlotte, N. C.; R. R. Ray, McAdenville, N. C.; P. M. Brown, Charlotte, N. C.; A. C. Miller, Shelby, N. C.; J. T. Anthony, Charlotte, N. C.; J. C. Smith, Newton, N. C.; R. S. Reinhardt, Lincolnton, N. C. The last six, together with the vice president, forming a Board of Governors. Thus began the second year of this organizatian's growth, and during the year, which had its fiscal ending May 11th, 1899, the Association more than doubled its membership.

May 11th, 1899, the following officers were elected : Dr. John. H. McAden, President, Charlotte, N. C.; J. P. Verdery, Vice-President, Augusta, Ga.; George B. Hiss, Sec. and Treas., Charlotte, N. C.; and Board of Governors, as follows: D. A. Tompkins, Chairman, Charlotte, N. C.; A. C. Miller, Shelby, N. C.; J. T. Anthony, Charlotte, N. C.; J. C. Smith, Newton, N. C.; R. S. Reinhardt, Lincolnton, N. C.; R. R. Ray, McAdenville, N. C.; W. C. Heath, Monroe, N. C.; A. P. Rhyne, Mt. Holly, N. C.; Leroy Springs, Lancaster, S. C.

Since the meeting of May 11th, 1899, the membership has increased over 100 per cent. The Board of Governors have held eight meetings, one of which was held in Philaphia, at which time there were some twenty-five members of the Association gathered together, and each and every one of these gentlemen have borne every dollar of expense incurred by virtue of the office which they hold. Now, after three years, this Association will shortly holds its Fourth Annual Convention, and it is predicted by those who are well informed on the subject of cotton manufacturing that there will be gathered together at this meeting a far greater number of Southern Cotton Manufacturers, and those indirectly connected with the business, than has ever been gathered together before in these United States, and it would be hard to locate to-day the man who would deign to say that The Southern Cotton Spinners' Association has not proven a success as an organization and financially beneficial to every manufacturer of cotton in the South.

This year, May 10th and 11th, there will be gathered together by invitation, as the guests of the Association, some of the most eminent men in the United States, who will come here for the purpose of addressing this great body of manufacturers, and to lend by their presence, grandeur to the occasion. What will take place this year at this gathering in the way of a distribution of knowledge, will be a revelation to those who have not kept in touch with the work of this Association and the growth of the greatest manufacturing industry of the South but the work of this Association will not cease with this Annual Meeting; but what will be witnessed here this month at the Annual Meeting of this Association, will hardly be more than a forecast of the great good that will be accomplished by the increase in the growth of the membership of this Association, and the gathering into this organization of the great intellect which is rapidly manipulating plans for the up-building of a cotton manufacturing industry, such as would never have been dreamed of when Lee surrendered at Appomattox.

SPEECHES AT THE BANQUET.

Talks Made to Cotton Spinners at Southern Cotton Spinners' Association Convention, May 11, 1899—Mr. Wittkowsky on "The South, Past, Present and Future, Industrially and Financially"—Toasts by Mr. Powell and Mr. Tompkins.

Mr. Wittkowsky, responding to the toast, "The South, Past, Present and Future, Industrially and Financially:" *Gentlemen*:

To me has been assigned the very pleasant task of spinning for you a yarn, about the South, its past, present, and its future.

The theme covered by these three epochs embraces such wide fields for mental exploration, affords such a vast scope for the contemplative mind, is so full of possibilities, capable of such great and inspiring lessons, that while I shall endeavor to perform that very pleasurable task to the best of my ability, yet in all sincerity I would fain have left that task to others better fitted to do such a subject justice.

But, gentlemen, I give you assurance at the outset that I will make up for my short-comings in handling so weighty a theme by making it as brief as the important subjects under consideration will admit.

Now, my hearers, what of the past? I shall not endeavor to resurrect the long dead past. I shall not delve into the long vista of past ages, but shall content myself with "looking backward" only to the time within the memory of many within hearing of my voice. My "past" for this occasion begins with that eventful, fateful, and ever memorable 9th of April, 1865, when the peerless Lee and his heroic band of followers accepted the inevitable in good faith, laid down their arms and began to march to their homes. Homes? How many of them had homes to go to? What once was their homesteads lay in ashes and their farms in ruin and desolation. All that was left of home was that which they had cherished in the memory of happy childhood days, of gleeful sports at the old field school house; perhaps the memory of the first glance of bright eyes and winning smiles of budding womanhood; perhaps the memory of the young wife of his bosom and his little prattling babe, or of an old father and a now sainted mother, who in broken accents gave him her blessing as she sent him forth to the field of duty.

Thither the soldier of the South turned his face, bowed down in grief, broken in spirit, sore of foot, lacerated at heart, despondent, on the verge of despair; nowhere appeared the slightest sign of a silver lining to the dark cloud hovering around and about him, as he, weary, hungry and penniless, wended his way. To him the sun, in his midday effulgence, seemed to have lost his luster; the breaking of day in those spring mornings failed to awaken in the birds their accustomed songs and peans of gladness and praise to the Creator. To him the grass was not as green, nor had the sky its wonted azure, and all nature seemed attuned to his sad feelings. One looks in vain in profane history for a similar condition of things. I find a portrayal only in sacred record comparable to it : the Lamentations of Jeremiah on the destruction of the temple.

But the people of the Southern cities were then, and at this day they are still, the purest and least alloyed of that sturdy Anglo-Saxon blood, with all which the term implies. Such a people inured as they had become by four years' hardship and self-denial could not long remain in the slough of despondence. They soon began with a will to repair the waste places, and thanks be to the Jehovah in the Highest, who worketh wonders beyond the ken of men, so it came to pass, that which the Southern man considered his greatest calamity, and one which he thought would hamper him most in the work of repairing his broken fortunes, namely, "the loss of his slaves," redowned to his greatest benefit, in the up-building of all sections of the South, bringing with it plenty, happiness and prosperity. Now everywhere is heard the sound of the axe, the hammer, the shovel and the pick, the spindle and the loom, the glowing forge and furnace, the result showing a money value of all holdings far, very far, in excess of the former money value of lands and the slaves included. For to pursue the even tenor of his way, with no further aspiration or incentive to develop the native resources which a kind Providence had so lavishly placed within his reach. But owing to the now altered condition of things of necessity, the white man of the South was thrown upon his own resources, with the result that his manhood and determination to succeed began to assert themselves, and hence this wonderful result.

Many young men of the South, growing to manhood's estate, became restless amid their impoverished environment, and sought homes and employment in more favored sections of our country, returning later to the country of their birth, imbued and inoculated with the push, thrift and experience that characterizes our Northern brethren, and in many instances inducing friends and acquaintances they had made in other fields of their labor to come South, and cast their lot with us, thus arousing and quickening the spirit of industrial pursuits to an extent never before equalled by any country.

Now, mark the result, and note the "Present South," which can best be illustrated by a few statistical facts to which I now crave your attention. But in order not to tire you I will confine myself chiefly to the comparison of the States of the Piedmont section of the South, with a few of the most prosperous States of New England, and while there are doubtless many gentlemen present who are familiar with these facts, yet I opine that the result of the comparison shown here below will be a revelation to many as it has been to me.

My first subject of comparison will be the increase of population from 1850 to 1890. We find :

Maine—	
Years. P. C.	
1850-60	
1860-70	
1870-80 3.51	
1880-90 1.87—13	.07
New Hampshire—	
Years. P. C.	
1850-60	
1860-70 2.38	
1870-80 9.01	
1880-90 8.51-22	.45
Vermont—	
Years. P. C.	
1850-60	
1 860-70	
1870-80	
1880-90	
	•//
Rhode Island—	
Years. P. C.	
1850-60	
1860-7024.47	
I870-So	
1880-90	.24
Massachusetts—	
Years. P. C.	
1850-60	
1860-70 18 38	
1870-80	
1880-90 25.57—90	.09
Total percentage, increase 225	.62
Alabama—	
Years. P. C.	
1850-60	
1860-70	
1870-80	
1880-9019 84-74	.83
	Ũ

Georgia—	
Years.	P. C.
1850 60	. 16.67
1860-70	
1870-80	. 30.24
1880-90	. 19.14—78.05
North Carolina—	
Years.	P. C.
1850-бо	. 14.25
1860.70	. 7.93
1870-So	. 30.65
1880-90	. 15.59—68.39
Tennessee—	
Years.	P. C.
1850-60	. 10 68
1860-70	.13.40
1870-80	. 22 55
1880 -9 0	. 14.60—61.23
South Carolina—	
Years.	P. C.
1850-60	. 5.27
1860 70	27
1870-80	.41.10
1880-90	. 15.63—62.27
Total percentage, increase	344.77

INCREASE OF CAPITAL IN THE VARIOUS MANUFACTURES FROM 1880 TO 1890.

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Maine—	
Years.	P. C.
	Inc.
1880	49,000,000
1890	80,000,000- 63
N. Westernalise	
New Hampshire—	
Years.	P. C.
	Inc.
1850\$	51,000,000
1890	

Vermont— Years.	D G
rears.	P. C. Inc.
1880\$:	23,000,000
1890	32,000,000— 39
Rhode Island—	
Years.	P. C.
1880 \$	Inc.
1890	
Massachusetts. Years.	P. C.
	Inc.
1880\$30	03,000,000
1890	30,000,000—108
Total average increase, per cent	
Alabama— Years.	D C
i cais.	P. C. Inc.
1880 \$	
1890	46,000,000—411
Georgia—	
Years.	P. C.
*	Inc.
1880\$ 1890	
North Carolina—	50,000,000-100
Years.	P. C.
	Inc.
1880 \$	
1890	32,000,000—145
Tennessee—	
Years.	P. C.
1880\$:	Inc.
1890.	
South Carolina—	J-,000,000 1 33
Years.	P. C.
	Inc.
1880	
1890	29,000,000—163
Total average increase, per cent	
- i our average mercade, per cent	

COAL-PER CENT.

Pennsylvania-		
Years.	Tons.	P. C. Inc.
1870	23,000,000	
1890		
1892		
Ohio-		
Years.	Tons.	P. C. Inc.
1870	2,000,000)
1890 1	18 ,0 00,000	•
1892	(4,000,000	- 600
Indiana—		
Years.	Tons.	Inc.
1870		
1880		
1890		
1892	3,300,000	— 655
Illinois.		
Years.	Tons.	Inc.
1870	2,000,000	
1880		
18901		
1892 1	7,000,000	- 750
Iowa—		
Years.	Tons.	P. C. Inc.
1870	263,000	
1880		
1890		
1892		- 1,040
Total average increase, per cent	•••••	3,341
Alabama—	(1)	D G
Years.	Tons.	P. C. Inc.
1870	10,000	
1892	,000,000–	-4,900

Georgia—		
Years.	Tous.	
1874	10,000	Inc.
1874 1893	40,000 37 2 ,000-	- 810
	372,000	030.
North Carolina-		
Years.	Tons.	P. C.
		Inc.
1889	192	
1891	20,000	- 103,
Tennessee—		
Years.	Tons.	P. C.
		Inc.
1870	133,000	
1892 2,	,400,000-	- 1,704
Virginia and West Virginia— Years.		D 0
		P. C. Inc.
1870	670 000	Inc.
1892	,000,00 0 -	- 1,226
Total average increase, per cent	• • • • • • • • •	8,763.
IRON.		
ikon.		
Pennsylvania-		
	Tous.	P. C.
		Inc.
1850		
1860		
1870		
1880		- 78.
1090	, 500, 234-	- 70.
Ohio-		
Years.	Tons.	P. C.
	-	Inc.
1850	140,616	
	288,977	
1870 1880	558,664 488,750	
1890	254.204-	- 81
		U.

Connecticut, Maine and Massachusetts-

Years.	Tons	P. C.
		Inc.
1850	66,266	
1860	69,550	
1870	78,925	
1880	92,549	
1890	88,251-	- 33
Total average increase, per cent	• • • • • • • •	192

SOUTHERN STATES.

Alabama—		
Years.	Tons.	P. C.
		Inc.
1860	3,720	
1870	11,350	
1880	171,139	
1890	1,570,319-	-4,200
Georgia and North Carolina—		
Years.	Tons.	P. C.
		Inc.
1860	2,700	
1870	5,500	
I880	84,000	
1890	258,900—	- 949
Tennessee-		
Years.	Tons.	P. C.
		Inc.
1860	56,900	
1870	64,900	
1880	9,300	
1890	773,000—	731
Texas—		
Years.	Tons	P C.
		Inc.
1860	3,250	
1870	2,500	
1880	3,200	
1890	13,000—	300

Virginia and West Virginia—

Years.	Tous. P. C.
	Inc.
1860	28,000
1870	84,000
1880	217,000
1890	500,000— 1,685
Total average increase, per cent	·····- 7,865

We now take up our great staple :

COTTON.

- ---

	Bales.
We find that in 1860, when slavery was at its height, we	
raised	3,849,000
With free labor, and notwithstanding that the South had	
lost during the Confederate War, by death, disease and	
disability, no less than 300,000 men, she made in 1870	4,347,000
In 1880	6,600,000
In 1890	8,674,000
The Crop of 1897 and 1898 Now as to its manufacture :	11,999,000

NEW ENGLAND STATES.

Years.	Spindles.	P. C.	Looms. P. C.
		Inc.	Inc.
1860	. 3,858,900		93.300
1870	. 5,498,000		114,900
1880	. 8,630,000		184,700
1890	. 10,836,000		250,000
1899	13,500,000-	-250	3,50,000- 275

SOUTHERN STATES.

Years.	Spindles	P. C.	Looms. P. C.
		Inc.	Inc.
1860	. 298,500		6,780
1870	327,800		6,250
1880	. 542,000		11,890
1890	. 1,554,000		36,250
1899	. 3,900,000–	-1,206	110,000-1,522

While many of those present can readily comprehend the capacity of production from the given number of spindles and looms, yet, as this may reach some not conversant with this subject, I take the liberty to give some details.

If our friend Miss Cleoparta (of Egypt) was living to-day and was still engaged in her favorite pastime of needlework, and took it into her head to embroider the initials of the name on a handkerchief or a pair of suspenders, as a Christmas present for one of our most prominent bachelor members of this association, and would telephone from Egypt an order to this association for a spool of thread to fit her cambric needle, the spindles now in use in the South could produce a thread reaching from here to Egypt in one minute of time. To spin a thread to reach around the earth, which measures, in round numbers, 25,000 miles, would require only four minutes of time.

Should we take it in our heads to furnish a belt for Her Ladyship, the earth, we could produce one 36 inches in width in eight working days of 11 hours each, and have plenty left for a nice large double bow knot and two long sash ribbons; for we can produce with our present number of looms in eight working days of 11 hours each, 31,250 miles of cloth. Thus I could go on and cite many more examples to show the magnitude of the Southern mill business, but for my promise at the outset that I would be brief, which promise, I apprehend, I have already broken.

Such is the succinct statement of the present South. The showing in most gratifying, and exceeds the ambition of the most sangiune of 35 years ago.

It is our good fortune to live in this, by nature, most favored section of our country, both as to climate and natural resources of every kind. The eyes, not only of the North, East and West, but of the whole civilized world are turning toward the Southern States and I am persuaded to think that, were the sage Horace Greely living to-day, he would not say, "Go West, young man, go West," but with

his clear perception of future posibilities, he himself, ere now, would have come South, and beckoning to you gentlemen of the North and East, would say, "Don't go West, but come South, gentlemen, come South."

One can make no mistake in going to any of the States of the South, they all have features before them. In this connection, I am reminded of the Irishman, who, while endeavoring to point out to a new arrival from the Emerald Isle, the difference between this country and his, said: "Moike, one man in this country is as good as another, and better, too, by jabbers." So, I say one State of the South is as good as another, "and better, too."

I may be pardoned, of course, for saying that the good old State of North Carolina is as good as any other of the Southern States, "and better, too," and that our city of Charlotte and the country around her is the best city and section of that State, which is as good as any other, "and better, too."

Yes, in this section one finds the greatest industrial development, especially in the manufacture of cotton. Gentlemen, if you take Charlotte as a central point and draw around it a circle of a hundred miles as the "crow flies," you will find that within that circle are located two million of the 3,900,000 spindles, and 58,000 of 110,000 looms of the Southern cotton industry.

While we enjoy many advantages over the East, yet we labor under some great disadvantages, viz: Banking facilities and cheap interest on money. While our Eastern friends get their money at from 3 to 5 per cent., we of the South have been paying 8 to 15 per cent., and are to-day paying from 6 to 10 per cent., which you all very well know is a great tax on our profits and a great hindrance to the full development of our country. We ought to put forth our best efforts to bring about a change.

Bear with me for a little while, and I will present to you a few figures showing the inequality of the circulating

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medium of the South as compared with the East. In 1890 we had a banking power in the United States per capita \$96.69. The greatest in any one State was Rhode Island, with \$371.62 per capita, and the minimum was in Arkansas, with \$4.63 per capita. Taking it by sections, we find that the six New England States had \$252 per capita, while the thirteen Southern States had but \$18.70. In view of these conditions, the marvel of our great success becomes the more phenomenal. May we not hope that the party now in power will soon make good its last campaign pledge to give relief in the financial and banking system; in my humble opinion "banks of is ue" under proper governmental supervision is the true remedy. But enough of the present South. Now, what of the future?

Who is there bold enough to assert what new developments will take place within the next twenty years? There is no way for mortal man to see into the future. The only guidance we have is the past. Taking that as the basis, the contemplative mind soars into the realm of fancy, which at this day may smack of Munchausenism. And yet who is bold enough now to gainsay what the imaginative, speculative mind may indulge in or give expression to?

If in the last 20 years (our greatest development dates backs no further) we have with an unestablished credit and our success as a manufacturing country still problematical, with restricted banking facilities, with more or less inexperienced managers of our industrial establishments, having barely opened the door of the natural resources within our reach, been able to accomplish such wonderful results, what may we not accomplish in the next 20 years?

With electricity yet in its infancy, with the constantly improving machinery and new inventions, with hundreds of thousands of unutilized water powers, is it not safe to say that we shall outstrip the past 20 years many hundred fold? There is, and can be, no doubt of it. Then, my fellow-citizens, let us all, as loyal Americans, true to our country and our dear flag, work together in peace and love and unity.

Let there be no South, no North, no East and no West. Let there be no contention of one section against another, but rather let there be emulation as to who can best serve his country's interest and thus serve his own.

Let us in our peaceful warfare follow the example set us by those brave and heroic men of every section of our country who recently went forth to carry to victory and renown our glorious flag.

Let us on this festive occasion resolve anew that for us and our latest posterity there is but one country, one flag, now, henceforth and evermore.

ADDRESS OF MR. T. C. POWELL, GENERAL FREIGHT AGENT SOUTHERN RAILWAY.

Mr. Chairman and Gentlemen :

I am somewhat embarrassed by the chairman's introduction—particularly in his reference to the passenger department, but riding on trains is something that does not come within my jurisdiction. There are some few special privileged persons who do ride on freight trains, but I believe they are persons who accompany stock.

When I accepted the invitation to come to Charlotte to-day I did not expect to be placed on the list for a speech. I therefore have not had an opportunity to write out my remarks in detail as I might otherwise have done. The question of transportation facilities is one that interests the Southern shippers, especially the Southern spinners, I think, almost more than any other part of the country. The development of the South, which Mr. Wittkowsky has so fully explained, has to a great extent been due to the development of the transportation facilities of the South. I met a gentleman about a month ago on the train coming from St. Louis who had, when a boy, transported cotton in a wagon drawn by four oxen 145 miles, for which he charged \$1 per 100 pounds. He later assisted me in the construction of a railroad between the same points. He became the president of that road. When I met him he had retired from business. In less than one generation the transportation facilities have arisen from the oxen to the railroad. My own experience does not go back that far, but I remember my father telling when he was a boy how he came from New York to Cincinatti by water. Now the Empire State Express from New York to Baltimore holds the record for fast record and regularity of record. The railroads of the South are endeavoring to bring themselves up to the standard that will give the Southern shippers the best service for the least money. It has sometimes

been said that the rates in the South are not as low per mile as the rates in the North—a statement which is entirely true. In the reports made by the Inter-State Commerce Commission, showing the rate per mile of the railroads of the whole country, they have divided the country into five sections, one of which takes in New York, Pennsylvania, and the New England States, and that section is used as 100 per cent. on which to base the others. If any of you have seen the statement you will see that the South section does not reach 50 per cent. of that section. Nevertheless the tendency of the rate is downward. The rate per ton in the South is less than it has ever been before. The address made by Mr. Sanborn as to export trade of the United States was particularly interesting to me because the South is better fixed to export than any other part of the country. It has more available ports than any other section. The Nicaragua Canal, which will undoubtedly be opened some time in the future, will give the South access to the Southern territories through a shorter route than any other section of the country. Taking the ports of export we have available as the farthest Southern port to the north Norfolk. We have then Wilmington, Charleston, Savannah, Brunswick, Jacksonville, and the newer ports of Miami and Tampa. The route via Miami to Havana is only 14 hours, and for that reason has become the most favorable route. The Plant Steamship Line has its boats from Tampa to Havana, so the South has a range of exports greater than any other parts of the country. In addition to that it has the means of reaching the Pacific coast quite as easily, and it has as cheap rates as the Northern cities. Under the method of adjusting the rates to the Pacific coast nearly every city in the South has approximately the same rate, the result being that one is just as ready to compete on the Pacific coast as the other. Mr. Richards was to have preceded me and would have furnished some statistics as to the growth of the cotton mill industry in the South, and I

will take the liberty of reading a few of his figures. In 1890 there were 36,000 looms and 1,500,000 spindles in the States traversed by the Southern Railway system, On January 1st, 1899, the number of looms had increased to 91,000, spindles 3,600,000. These figures I believe have also been given by Mr. Wittkowsky. The increase in the movement of traffic between the States can be gauged from year to year, taking into consideration the crop conditions and the industrial condition. The chance, however, for large development is in the export trade, and it is in the export trade that we desire to become pre-eminent, and we have through the recent acquisition of the South Carolina & Georgia road opened up a new port, so that we now have Charleston, Brunswick, and we reach by a friendly connection Miami and Tampa. I did not intend to refer particularly to the Southern Railway, but as my duties are with that line I am better acquainted with that line than There is another point on which I think there has others. been some misunderstanding in the past. Under the old system of railroading it was customary to give the junction points or competitive points a low scale of rates and to make up the loss that sometimes occurred on that low traffic by what some people thought exorbitant rates on the local traffic. It is not the purpose of the Southern lines to thwart the industries on the local lines by charging exorbitant rates. I think it necessary to refer particularly to that because there was at one time a great deal of injustice. It has sometimes been said that corn could be carried from the West to New York by a point and sent back from New York to that point cheaper than it could be shipped to that intermediate point. That condition has been changed. We recognize the competitive condition of the markets. We recognize that in order to get to a large market, such as New York, Chicago, Baltimore or Philadelphia, or to the West, it is necessary to give every point of production practically the same rates. That there has

been a reduction in the rates of freight in the South is shown by the reports of the railroads themselves. The reduction of freight has necessitated the consolidation of inter-For the same reason the equipment has been changed. ests. Col. Anthony told me the first car of Tennessee coal came in a car holding only 10 tons. To-day they will hold 30 to 40 tons. Not long ago we had application made to us for a flat car which would hold 100,000 for the purpose of carrying a block of marble to Providence, R. I., and the block actually weighed 90,000 within a few pounds. It has been made necessary for us to take into consideration a change in our rates. So far as we have been able to foresee changed conditions we have published our traffics with the idea which I have just explained. Colonel Authony calls my attention to this car which carried only 10 tons and cost him delivered, in freight, \$8 per ton. To-day the rate is \$2.25. Then, at the coal being given away, the rates of freight did not permit the successful handling of coal in Charlotte.

Gentlemen, when I got up I did not intend to say so much. I thank you for your kind attention.

REMARKS BY MR. TOMPKINS.

Mr. D. A. Tompkins said, in response to the toast, "Southern Textile Manufacturing :"

Gentlemen of the Association :

I want to repeat at the outset of what I have to say a sentiment that I expressed to-day in the association hall as having been uttered by Mr. Robert Y. Hayne, when he said : "I know of nothing, except the Christian religion, that can be compared with the influence of a free, social and commercial intercourse, for softening asperities, removing prejudices, extending knowledge and promoting human happiness." We have to-day in this meeting the fruits of cultivation of that sort of sentiment which was planted two years ago when a few members of a small association went North to consult with commission men about differences between the producers and the salesmen of yarn. When this committee reached the North, the report was that the committee fought shy of them, and did not see them for two or three days, and that they would not see them until they had invited them to dinner. Now, as we have all got together in one family, I would just like to ask the question amongst us girls here, who sent that invitation to dinner, Mr. Rhyne or Mr. Parvin. It still seems to be a question of who struck Billy Patterson. The dinner was in Philadelphia, and it was a liquid dinner-all liquid.

It seems to me that we have reached a condition in the United States when it is not a question of competition between the North and South, but when it is rather one of the United States against the rest of the world. We manufacture today in the United States about one-fourth of the cotton that is produced in the United States. If we enter upon a cutthroat competition between the North and South we will continue to manufacture about one-fourth and Germany and England will supply the rest of the world with cotton goods manufactured from American cotton, while we are

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fighting over a domestic trade for one-fourth of the product of the United States. What we want to do is to accomplish permanently what we have accomplished here tonight. Hold meetings in North Carolina that are composed of citizens of New England, Pennsylvania, Maryland and the Southern States for the purpose of promoting the foreign trade in American-made goods, and let us manufacture one-half or three-fourths of all the cotton that is made in America instead one-fourth of it. It will require, gentlemen, the very best efforts of the whole of New England, of the people of the Middle States, and all the people of the Southern States, working together, to accomplish this result. We are set in competition against a people in Germany who are the best educated in the world. We are set in competition in England against a people who have the best training in the world for commercial trade, and we must together establish education in this country by which we can make diversified products that will fit South America, that will fit the Philippine Islands and Cuba and all other countries where cotton goods go, and where the people wear cotton in preference to other goods. It is the consummation of folly for us to talk about competition with New England. There is no such thing. We and they can cut our throats in this domestic market, but in order to prosper we must get that foreign trade to which Mr. Sanborn referred in his lecture. The means of accomplishing this is to diversify our production. Here in the South we are making too much the same kind of goods. Everybody wants to make a four-yard sheeting, or No. 20's. I want the next generation to be educated to let up on me. I know how to make the plainer goods-it is the business of the younger men to find out how to make the better goods. It is your and my business to provide educational systems by which they can make these better goods. The price of these plainer goods is about three times the price of raw cotton. The price of the goods we make to-day in the

South is about 18 cents a pound on an average, whereas the average price of raw cotton is about 6 cents. In a town not 100 miles from here not over two weeks ago, I weighed some very ordinary dress goods that were being purchased by the ladies of that community. It ran up about 64 cents a pound that these people were paying for dress goods, and it is possible that cotton that their parents sold for 5 cents per pound went to make up these goods. Now we want the next generation to provide these goods, and we want the coarser goods left for this generation. I am an advocate of textile education. To have the younger generation instructed in arts that we have had to pick up. I am an advocate of an American merchant marine service, so that we may take the goods of this country to other countries in our own ships. Mr. Sanborn has told you that not 8 per cent. of the goods sent from this country go in American bottoms.

I think it appropriate that we should not only co-operate with the people of New England and get them to cooperate with us, and with the people of Pennsylvania, but also get them to co-operate with us to bring about the necessary legislation in this country for profitable manufacture. We ought, also, to be extremely conservative in our own business methods in this country. It is the custom of Southern manufacturers to issue statements to show how extremely well they are making out. In some few instances this may be true, but in the great majority these statements are made up by book-keeping more than they are made in the mills. Even if it were true that the results are being accomplished, it would be infinitely better that they should be conservatively handled and conservatively published.

It is extremely late, and I won't detain the convention further than to ask Mr. Parvin which one of those people issued that invitation? I want to know.

BOARD OF GOVERNORS' MEETINGS.

Since the last Annual Meeting, May 10th and 11th, 1900, the following meetings of the Board of Governors have been held for the purpose of transacting such matters as were of interest to the Association which had been brought to their attention by the President.

The first meeting was held in Charlotte, N. C., June 21st, 1900, and was attended by the following members of the Board of Governors:

Dr. J. H. McAden, Charlotte, N. C.; J. P. Verdery, Augusta, Ga.; Leroy Sgrings, Lancaster, S. C.; B. E. Willingham, Macon, Ga.; W. C. Heath, Monroe, N. C.; A. P. Rhyne, Mt. Holly, N. C.; R. S. Reinhardt, Lincolnton, N. C.; A. C. Miller, Shelby, N. C.; R. R. Ray, McAdensville, N. C.; J. C. Smith, Newton, N. C., and Geo. B. Hiss, Secy., Charlotte, N. C. In addition to the members of the Board of Governors, the following gentlemen were present by invitation : Messrs. J. P. Wilson, Charlotte, N. C.; Geo. E. Wilson, Charlotte, N. C.; J. M. Beatty, Charlotte, N. C.; A. J. Abernathy, Lincolnton, N. C., and J. C. Rankin, Spencer Mountain, N. C.

The second meeting was held at Charlotte, N. C., July 18th, 1900, and was attended by the following members of the Board of Governors: Messrs. R. R. Ray, McAdensville, N. C.; J. C. Smith, Newton, N. C.; R. S. Reinhardt, Lincolnton, N. C.; A. P. Rhyne, Mt. Holly, N. C.; W. C. Heath, Monroe, N. C; A. C. Miller, Shelby, N. C.; Dr. J. H. McAden, Charlotte, N. C., and Geo. B. Hiss, Secretary.

The third meeting was held at La Fayette Hotel, Philadelphia, Pa., Oct. 2nd, 1900, and the following members of the Board of Governors were present. Messrs. W. C. Heath, A. P. Rhyne, D. A. Tompkins, R. S. Reinhardt, A. C. Miller, J. C. Smith, Dr. J. H. McAden and Secretary Hiss. The 208

following members of the Association were present by invitation: Capt. Freno Dilling, King's Mountain, N. C.; J. E. Sherrill, Mooresville, N. C.; James Webb, Hillsboro, N. C.; J. S. Mauney, King's Mountain, N. C.; A. A. Shuford, Hickory, N. C.; A. G. Latta, Raleigh, N. C.; E. B Neave, Salisbury, N. C.; P. S. Baker, King's Mountain, N. C.; J. K. Dixon, Gastonia, N. C.; J. A. Smith, Denison, Tex.; J. D. Sherrill, Concord, N. C.; J. D. Moore, Gastonia, N. C.; J. R. Ashe, Yorkville, S. C.; C. E. Hutchison, Mt. Holly, N. C., and J. P. Wilson, Charlotte, N. C. This meeting at Philadelphia, Pa., lasted until Oct. 4th, when it stood adjourned subject to call of President McAden.

The fourth meeting of the Board of Governors was held Nov. 22nd, 1900, and was attended by the following members of the Board : Messrs. R. R. Ray, McAdensville, N. C.; J. C. Smith, Newton, N. C.; Leroy Springs, Lancaster, S. C.; R. S. Reinhardt, Lincolnton, N. C.; W. C. Heath, Monroe, N. C.; A. C. Miller, Shelby, N. C.; A. P. Rhyne, Mt. Holly, N. C.; President McAden, Charlotte, N. C., and Secretary Hiss.

The fifth meeting of the Board of Governors, held in Charlotte, N. C., Dec. 13th, 1900, and was attended by the following members of the Board of Governors: President McAden, Charlotte, N. C.; B. E. Willingham, Macon, Ga.; J. C. Smith, Newton, N. C.; R. S. Reinhardt, Lincolnton, N. C.; R. R. Ray, McAdensville, N. C.; W. C. Heath, Monroe, N. C.; A. P. Rhyne, Mt. Holly, N. C., and Geo. B. Hiss, Secretary The following were present by invitation : Messrs. Jno. P. Yount, Newton, N. C.; J. E. Sherrill, Mooresville, N. C.; J. G. Morrison, Mariposa, N. C., Jno. M. Scott, Charlotte, N. C.; Mr. Rudisill, Cherryville, N. C.; Jno. J. Ceorge, Cherryville, N. C., and B. D. Heath, Charlotte, N. C.

The sixth meeting of the Board of Governors, held in Charlotte, N. C., Jan. 25th, 1901, and was attended by the following members of the Board : Messrs. W. C. Heath, Monroe, N. C.; A. P. Rhyne, Mt. Holly, N. C.; D. A. Tompkins, Charlotte, N. C.; R. R. Ray, McAdensville, N. C.; R. S. Reinhart, Lincolnton, N. C.; J. C. Smith, Newton, N. C.; President McAden and Secretary. Hiss. Those present by invitation were Messrs. B. D. Heath, Charlotte, N. C.; J. P. Leak, Rockingham, N. C.; Capt. David Clark, Charlotte, N. C.

Independent of the foregoing mentioned meetings, numerous informal meetings of members of the Board of Governors and members of the Association were held in Charlotte, N. C., and Philadelphia, Pa.

COTTON GOODS EXPORTS.

Shipments From the United Kingdom in the Year 1900.

WASHINGTON, January 25.—There are yet "worlds to conquer" for the cotton manufacturers of the United States. True, their exports of cotton cloth have increased from 136 million yards in 1890 to 258 million yards in 1900, and would doubtless have been much greater in the last year but for the extremely high price of cotton. Yet when the exports of cotton goods by the United Kingdom for the year 1900 and preceding years are examined it becomes quite apparent that there is still a large opportunity awaiting a people who can plant the factory beside the cotton field and operate it with cheaper coal, better machinery and more skillful and effective labor than that of the nation which transports its cotton many thousand miles, brings its coal from thousands of feet below the surface and yet distributes more than five billion yards of cotton goods to the world every year.

The "Accounts Relating to the Trade and Navigation of the United Kingdom for the Year 1900," which has just been received by the Treasury Bureau of Statistics, shows the exportation of cotton cloth from the United Kingdom to the various parts of the world for the years 1898, 1899 and 1900. It shows that the total exportation of cotton piece goods of all kinds in 1900 was 5,034,250,600 yards, or about twenty times our own exports for the year, despite the fact that four-fifths of the raw cotton from which it was made was produced in the United States. The total importations of raw cotton into the United Kingdom in 1900 were 15,736,172 cwts., of which 12,190,169 cwts. were from the United States, 2,789,722 from Egypt, 333,778 from India, 270,462 from Brazil and 140,041 cwts. from other countries. The total value of the cotton imported into the United Kingdom in 1900 was £41,027,181, or \$199,659,000, and the total value of cotton manufactures exported from the United Kingdom in that year was £62,-032,313, or \$300,000,000.

True, the United Kingdom has not materially increased her exportations of cotton goods in the decade during which the United States has more than doubled her exports in that line; yet she has steadily and sturdily held her own in the markets of the world against the aggressions of other countries. The exports of cotton piece goods from the the United Kingdom in 1890 were \$5,124,966,000 yards, and in 1900, as already stated, 5,034,250,000 yards. Germany's exports of cotton manufactures, which are stated in official publications in kilograms and not in yards, increased from 28,285,400 kilograms in 1890 to 37,166,000 kilograms in 1899. From France the exports of cotton manufactures in 1890 were 17,286,000 kilos and in 1899 32,003,000 kilos. Thus while the United States has shown a greater percentage of growth in her exports of cotton manufactures than that of any other nation during the decade, the fact that Europe, although buying most of its cotton from the United States, exported in 1900 more than \$400,000,000 worth of cotton manufactures while our own manufactures were exporting about \$20,000,000 worth, suggests great future possibilities for a people for whom nature has done so much in her supply of the raw cotton and of all the requirements for its manufacture.

The following table exhibits the exportation of cotton piece goods from the United Kingdom in 1900, showing the total number of yards and the amount to each of the principal countries. More than half of the enormous total of 5,000,000,000 yards exported from the United Kingdom in 1900 went to her colonies and other territory over which she exercises control:

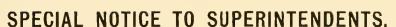
TWENTIETH CENTURY PUBLICATION.

COTTON MANUFACTURES EXPORTED FROM THE UNITED

KINGDOM 1	IN I	90	О.
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Countries.	-Yards.
British East Indies	2,018,593,800
China and Hong Kong	456,195,300
Turkey	299,227,700
Dutch East Indies	194,342,000
Egypt	190,473,800
Australia	177,126,300
Argentina	131,285,300
Japan	119,470,200
Brazil	104,937,600
Chili	98,025,800
Other countries	1,244,572,800

The Philadelphia Commercial Museum, in the course of its studies of the world's markets, finds that in 1899 the aggregate of the world's exports of manufactures of cotton was \$500,658,412, to which total the United States contributed \$23,566,914. England's exports in this line aggregated \$328,325,157; Germany's, \$53,637,776; France's, \$32,081,095. Even Switzerland outdid us with exports of cotton manufactures worth \$25,000,000.



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The attention of Superintendents is respectfully called to Article III. Sec. 1. of the Constution. Article I. Sec. 1. of the By-Laws is reproduced herein without the Amendment in order the Amendment may be observed. Any Superintendent now an Associate Member who is entitled to Active Membership, will kindly advise the Secretary of our Association in order that his name may be placed upon the Active Membership List.



ERRATA,

- Price, A. M., page 29 Active Membership list should be on Associate list, and read Superintendent Eureka Mills, Chester, S. C
- Omitted from Associate list, Ross, Jno. B., Jno. B. Ross & Co., Charlotte, N. C.
- Glynn, Martin P., R. A. Blythe & Co., Philadelphia, Pa., on Active list, should be on Associate list.

Associate list, page 31, Cloutman J. D., should read-Cloudman J. D.

- Omitted from Associate list, Comins, F. B., Treas. American Moisten ing Co., Boston, Mass.
- Dow, P. E. W. So. Agent American Mfg. Co., Atlanta, Ga., should read Dow, C. E. W. So. Agent Amer'n Moistening Co., Atlanta, Ga.
- Omitted from Associated list, Strang, Jas., Agent Metallic Drawing Roll Co., Indian Orchard, Mass.

Omitted from Associate list, Putman, Hooker Co., Cincinnati, Ohio. Dixon, E B., Associate list should read Dickson, E B.



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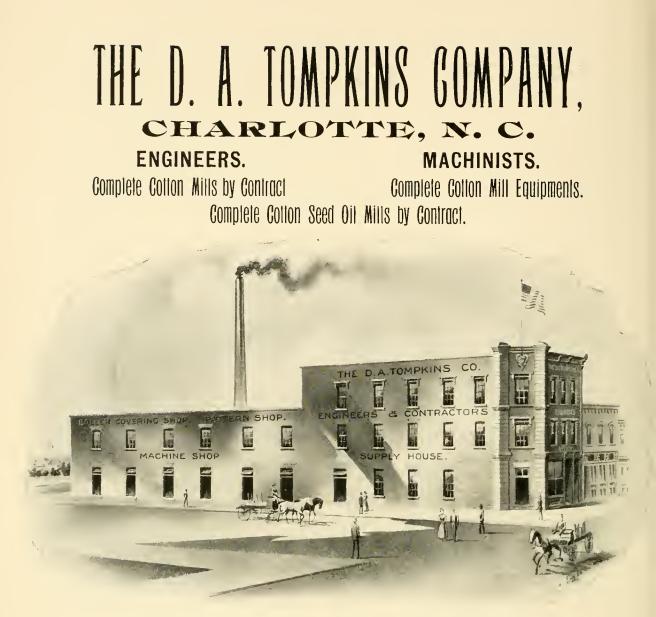
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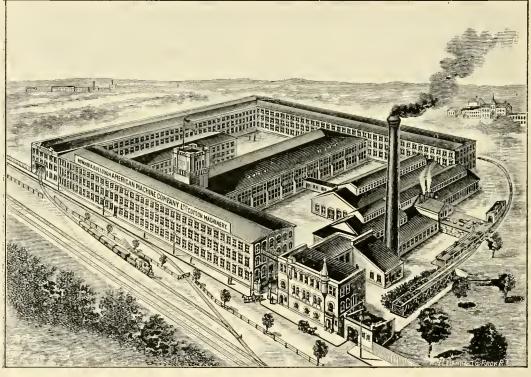
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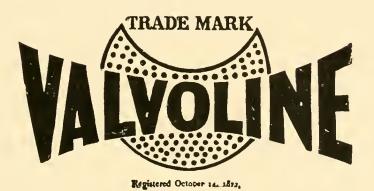
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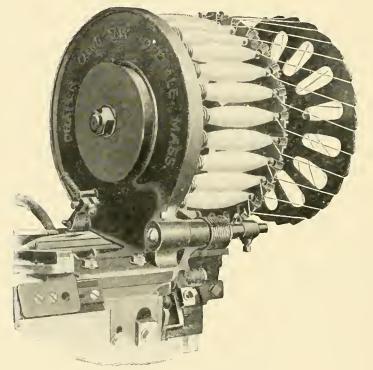
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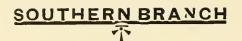
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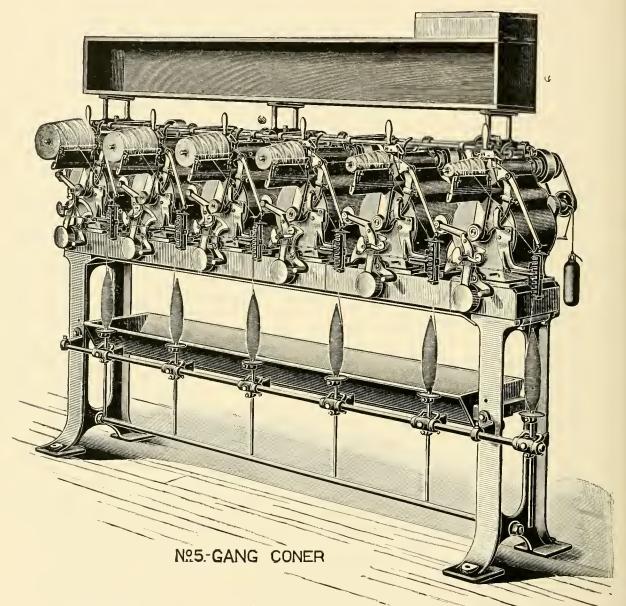
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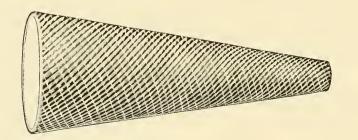
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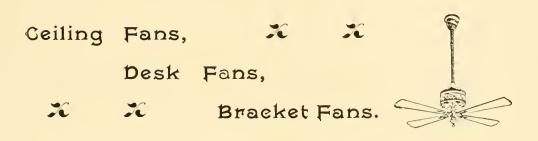
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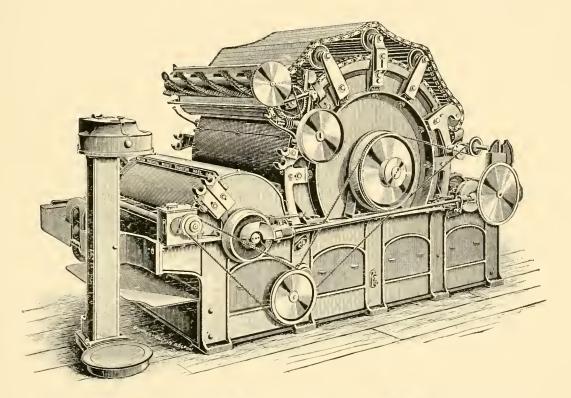
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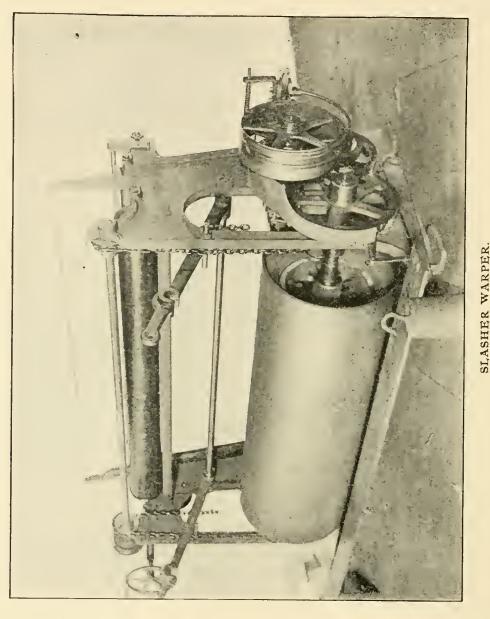
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hni Last season again demonstrated the incomparable hui superiority of The American Cotton Company's Round-Im lap Bale. Demand outran supply. With the additional ш III presses established in the South, the Company expects III HI. to meet the increased demand of 1900-1901, both for long and short staples. Ш

Roundlap savings at the mills begin with the unloadш ni III ing of the cars and do not cease until the intermediate lapper is reached. Ш

111 The more these bales are used the more their advanhu tages appear. A comparative test of Roundlap and m square cotton was recently made by the Massachusetts Cotton Mills, of Lowell, Mass., to determine the relative shrinkage in weight by drying out. The cotton was opened, loosened by hand, placed in new bags, weighed, ш and allowed to stand 184 hours before being reweighed. The square cotton lost 2.283 per cent., the Roundlap cotton 1.271 per cent., a saving in favor of the latter of 1.012 per cent., or 5.06 pounds per bale of 500 pounds net.

The Boston News Bureau Summary of October 19, 1900, published the following:

"The treasurer of one of the leading cotton mills of Massachusetts, says:

"We have used during the last twelve months over 30,000 Roundlap bales of cotton put up by the American Cotton Com-pany. In our estimation this is the best method of baling cot-ton. * * * The economy in the use of Roundlap bales is in hu III the character of the bale which does away with labor in the picking room at the mill, and the fact that we get practically too cents worth of cotton for every dollar paid out. The square bale in its journey from the South to the mill at the North will lose on an average at teast 2³/₄ pounds per bale, as compared with a loss of not over ¹/₄ pound in the Roundlap bale. "On the whole, we believe we derive from 3-16 to ¹/₄ cents per pound benefit through the use of the Roundlap bale from htt hu iii 100 Ш

III per pound benefit through the use of the Roundlap bale from Ш the time cotton is shipped until it is turned out as yarn in the mill.' '' Ш

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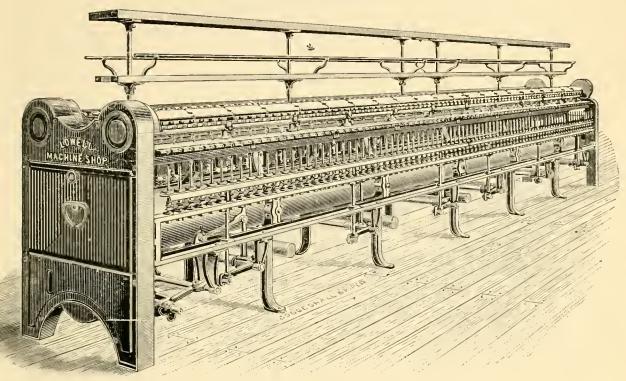
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