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“One Machine Instead of Two”

The Nasmith Comber is guaranteed to produce as strong and clean a yarn, with any stated percentage of waste, as any other comber and in very much larger production.

For more than twelve months we have been getting regular weekly deliveries of these machines from our works and we have no reason to suppose that the present rate of delivery will not be fully maintained or possibly increased during the continuance of the war.

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WILLOWS—Continuous Cotton Stock Opening, Cleaning, Metal Extracting and Condensing Outfit; also Square Box and Cone Willows or Dusters.

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CARDS—Wollen, Worsted, Cotton Waste, Shoddy, Hair, Jute and Asbestos Cards; also Special Cards for the manufacture of Wool Hats.

MULES—heavy and durable for wool and waste yarn.

TWISTERS—Plain Twisters, also Fancy Twisters for Flake, Loop or Bourette Yarn.

BOBBIN WINDERS—with automatic bobbin builder and adjustable creel for different length speeces.

WARPING MACHINERY—Copper Cylinder Warp Dressers with single and double size pans; Beemers; Section and Pinless Warp Mills, Creeds and Dresser Spoolers for Wool or Worsted.

GRINDERS, etc.—Floor, Traverse and Portable Grinders for cards, garnets or rag pickers; also Turning Rests, Fillet Winders, Card Stretchers and Cleaning Frames.

A complete line of Machinery for Manufacturing Gunny Bagging from Old Gunny Bagging; also for manufacturing Coarse Yarns, Mop Yarn and Rope from Cotton Waste.

Felting Machinery for Manufacturing Soft Felts or Commercial Batts, for Mattresses, Comforts, etc., made from Cotton, Cotton Waste, Linters, Jute, Wool and Wool Waste.

Special Circulars Furnished for Each Machine

WOOLEN CARD

Circular No. J55

FINISHER CARD—No. 8

WITH MAIN CYLINDER 60 INCHES DIAMETER, SIX WORKERS AND 20 INCH RING DOFFERS

Case Hardened Journals, Self-Aligning Ball Bearings for Main Cylinders, Self-Aligning Sleeve Bearings on All Other Cylinders, Convenient and Positive Adjustments

We Build a Complete line of Wollen and Worsted Carding Machines to meet the requirements of the manufacturer

Send Us Your Specifications

Iron or Wood Main Cylinders, 48 Inches, 54 Inches or 60 Inches Diameter, any width
NORTHROP
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WORSTED LOOMS

SAVE MORE
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HOUGHTON'S OLIVE OIL EMULSION has a rich, creamy consistency, requiring the least amount of water. In preparing the emulsion for application to the stock it is usually mixed with equal parts water, making the emulsion go as far as the natural oil, gallon for gallon.

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Importers and Exporters of
ANILINE and ALIZARINE COLORS—EXTRACTS and CHEMICALS

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A complete line of Direct Acid and Chrome Colors carried in stock

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We buy, sell or exchange all classes of colors for Cotton, Wool and Silk

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Dyestuffs, Chemicals and Sulphonated Oils

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644 Greenwich Street

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Combining the latest European and American methods.

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that we cannot solve

Formulas for the best method of obtaining any
DESIRED FINISH on any fabric cheerfully given
37 YEARS AGO THIS MONTH EDISON invented the first practical incandescent lamp. The date, October 21st, is observed the country over as the anniversary of what is perhaps the most important epoch in all lighting progress.

In the EDISON MAZDA lamp of today is summed up the achievements of 37 years of progress. The latest development, the EDISON MAZDA C lamp, with its wonderful high efficiency and its remarkable candlepower, is an achievement as epoch-making as Edison's first lamp.

Practically every factory in the country can benefit by the exceptional current-economy of the MAZDA C lamp. Lighting companies, Edison agents or our own representatives will gladly demonstrate any time. Don't face the dark days of winter with a poorly lighted factory, especially since a few MAZDA C lamps will give you all the extra light you need.

EDISON LAMP WORKS
OF GENERAL ELECTRIC COMPANY
HARRISON, N. J.
THE PURCHASING UNIT

If one were to analyze the subscription list of TEXTILE WORLD JOURNAL from the buying unit standpoint, he would find that practically every large purchaser of textile mill supplies in this country is represented. In fact we have made such an analysis and, surprising though it may seem, the Journal reaches through paid subscriptions of purchasing agents, superintendents, managers and active mill officials between 85 and 90 per cent. of the textile industry's purchasing power.

Setting aside all possible interest in the reading pages as a motive for subscribing, let us look at it from the purchasing standpoint. The reason for such a large representation among the industry's buying units is that modern buying and selling methods include trade paper advertising as one of the most important channels of communication. Sellers depend upon it for carrying the story of their products to the trade. Buyers depend upon it for ideas, reference purposes and oftentimes the actual placing of orders. Industrial buying and selling has become such an involved process that trade paper advertising was destined from the first to prove itself one of the biggest factors in reducing it to a simple, efficient basis. So much so that no buyer or seller of textile mill supplies, equipment, etc., can conduct his work efficiently without intelligent use of TEXTILE WORLD JOURNAL, which is through the medium of the purchasing unit for buying and selling.

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ABERFOYLE MANUFACTURING COMPANY

DYERS, BLEACHERS, GASSERS
DYERS OF COLORS FAST TO
SUN AND BLEACHING

MERGERIZED
YARNS

Our Yarns are the Products of American Mills

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PHILADELPHIA

746 INSURANCE EXCHANGE
CHICAGO
COTTON IN EXPLOSIVES

Striking Increase for First Half of 1916 Over 1915

Washington, Oct. 10.—A preliminary statement of the quantity of cotton fiber consumed in the manufacture of cotton and of explosives of all kinds has been issued by Director Sam. L. Rogers, of the Census Department. It consists of a summary of the quantities of cotton fiber; various kinds of cotton, consumed during the calendar year 1915, and the first two quarters of 1916.

These statistics have been collected in compliance with the requirements of the Act of Congress approved August 7, 1910, which directs the Census Bureau "Collect and publish statistics of raw and prepared cotton and cotton products, and all fiber consumed in the manufacture of gunnycotton and explosives of all kinds, and of absorbent and medicated cotton." The Bureau listed all manufacturers of gunnycotton and other explosives in the United States, including the Army and Navy plants, and furnished them with the necessary blanks for reporting the quantity of cotton fiber consumed. Returns were received from 178 establishments. Of these 153 reported that they did not consume any cotton fiber of any character. There were 25 concerns which reported the consumption of bleached or raw cotton fiber. This number included several engaged in the manufacture of fireworks and using only very small quantities of cotton fiber consumed.

While a few of the manufacturers of explosives bleach all or a part of the cotton fiber used by them, it appears to be the general practice to purchase the fiber already prepared. The statistics are accordingly given only on the bleached fiber used consist principally of lint, although small quantities of hull fiber, waste, and low grade cotton were also used. A number of establishments were unable to segregate the kind of cotton fiber consumed, hence all bleached fiber used for this purpose is given in one total.

The quantity of bleached cotton fiber consumed in the United States during the calendar year 1915 in the manufacture of explosives was 121,331,885 pounds, equivalent to 244,003 bales of 500 pounds each net weight. During the three months ending March 31, 1916, there were consumed in this industry, 144,988 bales, and during the three months ending June 30, 1916, 142,723 bales. The increased use of cotton fiber in this industry is striking, the quantity consumed during the first half of 1916 being considerably in excess of the total for 1915. The quantity of prepared cotton held on June 30, 1916, by the manufacturers of explosives was 11,447,422 pounds, equivalent to 22,805 bales of 500 pounds each. This quantity compares with 26,933 bales on March 31, 1916, and 30,483 bales on December 31, 1915. The bureau will now collect quarterly statistics of this character, and the reports will be issued as soon as possible after the termination of each quarter.

The loss in bleaching cotton for ni—

(Continued on page 16)

WOOL INDUSTRY CENSUS

Figures Giving Comparisons Between 1910 and 1914

The Bureau of the Census has issued a preliminary statement on the manufacture of woolen and worsted goods, giving comparisons between the industries in 1910 and 1914. Figures follow:

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Fall River Wage Request

Fall River, Mass., Oct. 12.—Fall River weavers want another advance of at least 10 per cent. in wages. At their meeting last week, they directed their representatives to the Textile Congress to demand that the meeting be held on Wednesday night next, with the wish of the organization that the fact when the increase was made four months ago the employers protested against precipitate action so quickly after an improvement by which stockholders profited a little after a long period of intermittent activity in the cloth market was seemingly forgotten. The vote of instruction was accompanied with a request that the council be informed that the weavers are opposed to the policy of delay in dealing with the question. Sec. James Whitehead made this comment about the action: "Market conditions warrant an increase in wages such as our association wants. There is no question in my mind about the ability of the manufacturers to comply with our request without doing harm to their stockholders. They are making money out of this large dividends. The operatives are asking only what they are entitled to.

For Cartridge Cloth

Washington, Oct. 7.—The Bureau of Supplies and Accounts, Navy Department, is inviting proposals to be opened on October 24 for furnishing 200,000 square yards silk cartridge bag cloth, heavy, to be delivered at $0.04 per yard. The Grand Ball Room of the Waldorf has been reserved for this occasion, and tables will be arranged seating eight persons each. Speaks of national prominence will address the banquet and the meetings of the associations and of the stockholders. Details concerning each meeting will be published when available.

JOBBERS' WINTER MEETING

Association Convenes in New York on January 15

The following dates for the regular winter meeting of the National Wholesale Dry Goods Association and its subsidiaries have been announced through the office of the Secretary-Treasurer in Philadelphia: Jobbers Association of Knit Goods Buyers, Monday, January 15 at 10 a.m.; Jobbers Association of Dress Fabric Buyers, Tuesday, January 16 at 9:30 a.m.; Jobbers Association of Notion Buyers, Wednesday, January 17 at 2 p.m.; banquet of the National Wholesale Dry Goods Association, including all auxiliaries and associate members, Wednesday, January 17 at 7 p.m.; meeting of National Association Thursday, January 18 at 10 a.m. All meetings and the banquet will be held as usual at the Waldorf-Astoria.

The entertainment features will not be held separately as in former years, but the National Association and its auxiliaries will come together for a banquet at which it is expected that the total attendance will exceed 1,000. The Grand Ball Room of the Waldorf has been reserved for this occasion, and tables will be arranged seating eight persons each. Speakers of national prominence will address the banquet and the meetings of the association and of the stockholders. Details concerning each meeting will be published when available.

KNIT GOODS EMBARGO

Includes Underwear and Hosiery—Data of English Imports from U. S.

Washington, Oct. 12.—The British embargo on cotton clothing, including hosiery, as announced in the Textile World Journal for last week, also applies to underwears and to knit goods containing forty-five per cent. cotton, according to officials of the State Department.

Previous to this embargo, issued on Oct. 3, imports of wool had been prohibited in special cases. As this late embargo prohibits the importation of cotton; therefore, woolen goods, cotton goods, and any percentage mixture of the two are prohibited, according to the view taken by State Department officials.

There has been considerable question also as regards mixtures of cotton and silk, and the following advice has been received from the officials of the British authorities:

No decision has as yet been reached in the case of goods of mixed cotton and silk, and samples should be submitted to enable the attorneys to determine whether such goods may be considered silk.

This is the latest information that has been received relative to silk or wood fibre goods or combinations thereof.

While the State Department has not yet taken the matter up as to whether or not special permits to import hosiery and other knit goods into Great Britain will be issued, it is assumed by the officials that these permits will be granted.

There has been a great increase in the importation of knit goods wearing apparel from this country into the United Kingdom, according to figures compiled by the Statistical Department of the British Trade and Industry, England, Scotland and Ireland as the United Kingdom under the heading of 'knit goods wearing apparel,' which includes mostly underwear and hosiery, the department's figures show that for the first week of October from this country to the United Kingdom were 683,842. In 1912 the figures advanced to 745,777; further advancing in 1913 to $0,416,498 they fell, however, in 1914 to $0,931,094, and then increasing during the current year for the week ending October 12 to $1,044,424, an increase of 70,099. The largest import of that commodity which Great Britain has ever made from the United States.

The Department is at the present time completing its figures for the fiscal year 1916, which shows that the imports have again advanced and are $1,921,045.

Figures have just reached the State Department from English sources showing the imports from the United States and other countries on the cotton stockings and socks. According to those figures, in 1913, England imported from this country $2,440,000; in 1914 to $200,355 and again in 1915 to $1,410,410. During the same time the total imports from all other countries were in 1913 $2,100, in 1914 $4,015, and in 1915 $3,495.

The cotton statistics show that cotton goods imported, other than hosey—

(Continued on page 16)
ATTEND TO OUR CREDIT: WE BELIEVE IN THE CONSERVATION OF ECONOMY TO DOMESTIC INDUSTRIES.

COTTON GOODS CONDITIONS AND EXPORT TRADE

WAGE EARNERS AND THE TARIFF

If the census figures for the years 1914 and 1909 could be interpreted literally, it would indicate that wool manufacturing in this country had been a declining industry during that period. Preliminary figures for the census of 1919 indicate that the number of wool manufacturing establishments of about 123 per cent, of 5.8 per cent in the number of wage earners, of 6.2 per cent in capital invested, of 5.9 per cent in materials used and 6.6 per cent in total wages paid. While a greater part of the year 1914 was one of unusual depression in the wool manufacturing industry, as indicated by the 1914 census, may have been due to altered methods of compilation. Nevertheless, it is a fact that the year 1914 in its marked the combination of the adverse effect of tariff agitation and tariff revision, which had restricted the growth of the industry seriously.

Assuming that certain of the figures for the two census years allow fair comparisons, nothing of greater interest is to be deduced than the radical increase in capita earnings of operatives and in the percentage of wages to total value of products. During the year 1914 was an increase in the average earnings per capita of 12 per cent, the average of 1914 being $480. In 1914 wages were 20 to 25 per cent higher, while in 1909 they were only 16 per cent. Despite this large increase in wages there has been since 1914 a very much more marked advance, and it is probably safe to assume that wages in the woolen industry are today 35 to 40 per cent to 30 per cent higher than in 1909. Every advance, however, goes proportionately smaller return upon the capital invested. Therefore, operatives in this industry have every incentive to exert themselves in maintaining the present wage status. They, rather than manufacturers, should be most concerned about the enactment of an adequate protective tariff, and about the conservation of domestic interests to meet the commercial invasion of this country by foreign manufacturers after the war.

Thanks to the Allies, submarine warfare which may be waged by the Germans along the coast of this country is of more vital importance to the textile industry than it was even under the conditions existent prior to the present war. The insistence of Great Britain upon a complete blockade and cotton upon the contraband list has had elements of greater future danger for this country than any other, but should the work of German undersea boats along this coast prove permanently effective this country could not fail to suffer almost as much as Great Britain, in so far as its textile import and export interests are concerned.

Our need for wool is to-day almost as great as that of Great Britain, owing to the fact that the British Government has reduced its foreign sources of supply to much wool as can be obtained in South Africa and South America. The great bulk of this wool must be imported in British bottoms, or in foreign ships that would be considered by the Germans as their prey. The unexpected has come to the rescue of the wool manufacturer since the war started that it need surprise no one if the menace of the German submarines should prove sufficient to force a further radical advance in wool values.
Chemical Import Statistics: Need for Greater Information for Development of Domestic Industry

An address by Dr. Bernhard C. Lehman, a well-known food and nutrition chemist, was made last evening before a joint meeting of the New York section of the Society for the Promotion of Engineering Education and the American Electrochemical Society and the Society of Chemical Industry. The address was followed by a discussion of the necessity of having more detailed and up-to-date Government statistics on the imports of chemicals and dyestuffs. Dr. Lehman advocated the collection of such information, in the form of names of those materials that in normal times come from abroad and are not made here, and by branch of the chemical industry.

He declared that quantities, prices and sources of consumption are irrelevant and immaterial, and that without statistical information as to the source of the raw materials it was impossible to make a real policy for the development of the chemical industry. The Federal government, he said, is not yet awakened to the fact that it is the duty of the various government agencies to assist in the development of this industry.

With such data Dr. Lehman believes that the Chemical and Metallurgical Society of America can accomplish its purpose of having the members of the society compile all of the submitted material into a composite list and then ask the Commerce Department to restate the quantities and values imported monthly, quarterly, or annually, as may appear best to the society.

Speaking of the possibility of establishing a self-contained industry in this country, Dr. Lehman said: "If we are to maintain our present status as a chemical nation we shall have to face the fact that we are importers.

"Self-sufficiency is an illusion, and the idea of making all of the tools and appliances of existence is impossible except by a few very primitive and inefficient countries. Even in the sparsely settled parts of the United States, we are dependent upon imports for the necessities of life."

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TEXTILE WORLD JOURNAL
October 14, 1916.

PROTEST KNIT EMBARGO

Formulate Resolution of Protest to State

A conference of Philadelphia Hos-
siery Manufacturers was held at the
Manufacturers Club Thursday evening,
Oct. 12, to discuss the recent embargo
established by Great Brit-
ain against imports of cotton knit goods.
The manufacturers present at the meet-
ing expressed themselves in the strong-
est possible terms against the arbitrary
unfairness of the embargo, per se, which coming without notice and being of a
repetitive character, has involved many
manufacturers. They have been led to
cover this foreign business with orders
for special yarns, etc., which a spirit of
fairness should have given the trade at
least 30 or 60 days' notice, so that manu-
facturers would have had time to clear
up their merchandise with the least
possible loss. Furthermore, the embargo
would not have had the chance to
affect those goods on order and as yet
undelivered.

A strong feeling of resentment at the
arbitrary action of the English govern-
ment marked the meeting, and it was the
consensus of opinion that the State
Department should take steps whereby
this situation might be relieved.

It was first decided to adopt the
following resolution to be sent to the
State Department at Washington: Re-
solved that the Manufacturers Club
believing that a protest should be entered
against the embargo on knit goods, and
that the State Department should be
urged to demand that the embargo
should either be lifted or so modified
as not to affect merchandise sold prior
to the date of the embargo and remain-
ning undelivered.

Knit Goods Embargo
(Continued from page 13)

were as follows: From the United States,
in 1913, $13,139,685 and for the
same period from Japan, $314,699. For
1914 the figures advanced for the im-
ports from the United States to $2,429,515 and from Japan they fell off to
$185,593. For 1915, the latest figures obtained, the imports from the
United States were $1,315,800, and from Japan they also showed an increase
to $1,035,495.

Worri has reached the State Depart-
ment, from unofficial British sources
saying that the American and Japan-
s hosiery and knit goods manufacturers
are practically monopolizing the British market. Mill hands have been laid off and in many cases it is understood when a British manufacturer has actu-
ally secured an order it has been con-
temned in favor of American and Japanese mills. It seems fair to assume, if these reports be true, that competi-
tive pressure has likewise brought to
bear on the British Government by English
manufacturers.

Imports being received here by of-
ficials of the Department of Com-
merce relative to new this week goods
embargo, which is that is being taken in this manner by Amer-
ican manufacturers.

Textile Club at Boston

The Textile Club, whose membership
is made up of the leaders of Boston's
interests in cotton mills in Northern New
England, and which holds its meetings
during the week in the Boston's Hotel,
Boston, the first Saturday of every
month, met at the latter hostelry last
Saturday, and as in the wiretransmis-
tion of the world series baseball
game, had an attendance of over 25.

DYE TARIFF INSTRUCTIONS

Duty as Per New Law on Withdrawals of

WASHINGTON, D. C., Oct. 9.—As-
sistant Secretary of the Treasury
Andrew J. Peters has just communicated
through his Washington office to a New York relative to the duty on dyestuffs
as provided for by the last session of
Congress, on special interest to the
textile trade. The Collector has been requested to "assess duty on merchant-
baring or dyebath or dye-stuff" (dy-
estuffs) withdrawn from a public or pri-
vate bonded warehous for consump-
tion after the 1st of October. The
rates provided in the provisions in question of the Act of Sept. 8, 1916, even
though imported and entered in such
warehouse prior to Sept. 9, 1916." The letter in full is as follows:

The provision has been presented to the
department whether dyestuffs im-
ported and entered for warehouse un-
less with the 1st of October, or not withdrawn from warehouse until after the
taking effect of the Revenue Act of Sept. 8, 1916, duties are levied under
Title V of the latter act, when dyestuffs are covered by the provisions of
the act. The enactment of the provisions in question of the later act
provides:

"The Act of Oct. 1, 1916, the inten-
tion of Congress to make the provi-
sions of this Title applicable only
to importations arriving after the
taking effect of the new act.

"Sec. 20 of the Customs Administra-
tive Act of June 10, 1980, was, in part,
as follows:

""Any merchandise deposited in any
public or private bonded-warehouse
may be withdrawn from such ware-
house within three years from the date of
original importation, on payment of the
customs duties to which it may be
subject by law at the time of such
withdrawal."

The proviso extended by the Act of Oct. 1,
1890, the language is as follows:

""Any merchandise deposited into
public or private bonded warehouse
may be withdrawn for consumption
within three years from the date of
original importation upon payment
of the duties and charges to which it may be subject by law at the
time of such withdrawal."

"The quoted portion of original sec-
Sec. III. of the tariff act of Oct. 3, 1913.

"By the Act of Dec. 1, 1902, Sec. 20 of
the Act of Act. 10, 1902, it will be the
rate of duty to be imposed by
merchandise imported after the 1st of
withdrawal, although this proviso is
now omitted from the tariff act of
the amendment omitted from the tariff
act of 1909.

In T. D. 25, the Circuit Court of
Massachusetts held that the duty for the
wine of Dec. 15, 1902, was declaratory of
the meaning of the earlier act, it appearing that the amending act was enacted by
Congress in consequence of the appre-
ended results of a decision from which
an appeal had been taken.

"Although the enacting clause of the dyestuff provision of the Act of Sept.
8, 1916, mentions it as the same
section when imported from any
foreign country, Paragraph 5 would appear to apply to the above
decision and make the products with-
drawn from warehouse, after the Act
became effective, duty free at the
same rate of duty as may be imposed
by law upon articles of merchandise
imported without withdrawal." Note
also T. D. 27, 412.

"You will, therefore, assess duty on
merchandise of the character in ques-
tion withdrawn from a public or private
bonded warehouse for consumption on
the 1st of October, 1916, at the rates
provided in the provisions of the Act of
Sept. 8, 1916, T. D. 85,
607, even though imported and entered
in such warehouse prior to Sept. 9, 1916."

Cotton in Explosives
(Continued from page 13)

trating purposes varies considerably
even on the raw fiber, some stock being quite clean and some very trashy. From the in-
formation at hand it appears that the
loss in preparing linters from the wrap-
ped and iron bound bales to the puri-
fied fiber as used in nitration is from 30 to 40 per cent. Based on an average loss of 35 per cent, the gross weight of cotton fiber used in the manufacture of explosives was 375,000 equivalent 500 pound bales in 1915, 233,000 bales for the first and 220,000 for the second quarter of 1916.

In addition to the prepared cotton consumed in the United States, the manufacture of guncotton and other ex-

Wool Goods for Navy

Bids will be opened Oct. 31 at the Bureau of Accounts, Washington, for supplying the Brooklyn
Navy Yard with 25,000 yards dark blue 16-ounce cloth, 16,6-ounce blue cord, 4-inch blue cloth, 35,000 yards overcoat cloth; 320 yards, 16-inch, 4-
inch, dark color; 50,000 yards cotton duck; 60 yards, 14-
inch, blue flanne-
el; 35,000 yards, 36-inch, blue lining
flannel; 10,000 yards, 34-inch, navy blue
worsted serge.

Men's Wear Trade Note

It is announced by J. J. B Kirckaldy, selling agent of the United States Worsted Co., will act in a similar manner for those.

Woollen goods for sale.
JAPAN'S COTTON MILLS

Decrease in Number, But Increase in Spindlage and Efficiency

WASHINGTON, Oct. 14.—The cotton-mill industry of Japan is one of the most important of that lazy, tight-little island country. There are at the present time 36 spinning mills in the country with a total capitalization of about $45,000,000. The number of spindles at work, according to an investigation made in the middle of June was 2,763,000. The working people employed included 23,950 males and 95,700 females, or a total of 123,350 persons. The output of cotton yarn is said to amount to an average of 160,000 bales per month.

A comparison with conditions as they existed for the first six months of the year, shows some peculiar features. For instance, the number of spindles has been reduced from 48 to the 36 above noted. The paid up capital has been increased from $25,460,119 to $43,000,683; the number of spindles has increased from 482,497 to 2,763,000, or almost double. The number of workmen has also increased from 79,881 to 123,350, and the output has increased from 85,000 to 160,000 bales per month. That the increase in the number of workmen employed has not kept pace with the increase in the output, is taken to mean that there has been an increase of the efficiency of the workers, and the reduction of the number of mill shows that there is in Japan, as in the United States, a movement toward the pooling of interests in order to get the best results with a minimum of expense and loss of energy.

One thing to which attention is specially called is the tendency to increase the number of spindles, and the amount of capital involved, and it is expected that the end of the present year will see a much marked development in this respect.

Of course, taken in comparison with the world’s aggregate of 138,917,969 spindles at work last year, Japan’s share is very small, only a little over 2 per cent., and only about one-half as much as the one-fifth her capital. If compared with England’s 57,000,000 spindles; but there is every reason to believe that it is the intention of the Japanese to overcome that disadvantage just as fast as possible, and as fast as she can find the capital for which to dispose satisfactorily of this rapidly increasing production, for which purpose she expects to further extend her markets on China and the Southern Pacific. Already the sale of cotton yarn to China has increased from a value of $3,258,500 in 1906 to $3,461,500 in 1916, figures being for the first six months of each year.

THE TEXTILE WORLD JOURNAL

The Textile Reconstruction of France*

Conditions in the Department Du Nord Before the War

By ALFRED RENOUD

At the present moment three-fourths of the Department Du Nord, France, are in the hands of the Germans. Industrial life has not only disappeared from the whole region, but a large number of industrial establishments, the working-stock had, the raw materials they contained, the whole supply of machinery and goods are entirely gone; either because they have been looted, or because they have been requisitioned without valueless receipts, or the working-stock for some carried away to foreign points finally, because the machinery stripped of copper parts by the enemy is nothing but a heap of iron, or useless molten mass. Whatever the cause made be, all this no longer exists and will surely have to be replaced after the war.

An industrial district, like Le Nord, that stands at the top of the textile industry in France, and which, therefore, can be considered one of the most important textile centers of the world, does not give up its predominance easily and will want to resume the high position which it held before the war. One must reckon with the possibility that it will be some years before the industry will be as strong and as active as it was before.

The textile industry belongs to the life of the people, and will continue to exist, and will not be exterminated.

Under these conditions it seems to us that there will be a great opportunity for the United States in the replacing of machines in the establishments which have been stripped of their equipment. Preparatory machines for cotton and wool, spinning and twining machines for two industry, and weaving and knitting machines, apparatus for dyeing, bleaching and finishing, etc. As soon as the war is ended, since factory districts of these districts will need not only such equipment, but also parts for the quick restoration of damaged machinery, for the supply of which America will have a great chance. To be sure, the construction engineers of England, France and Switzerland, will not fail to place themselves in line, but in the first two countries a large number of textile machine shops have most of their men occupied with the manufacture of war munitions, and after the war will be so overrun with orders as to be unable to fill them promptly, and will be obliged to delay their deliveries indefinitely. Besides one must take it for granted that, for a certain number of years, at least, German engineers will be systematically barred from French business. However, all these concerns will surely install themselves in Switzerland, and put on a Swiss label; several have already taken such steps. But they will intentionally lose precious time in making an installation, and this will not help to secure a new clientage for them. Moreover, the French mill owners are warned, and associations have already been formed to meet this eventuality and to enmarch such rascals. On the other hand, the United States engineers are perfectly prepared to place themselves in the foremost ranks with a large number of machines, and will then have (we repeat it) an important place as suppliers of the French cleantment that knows how to value a good and reasonably priced construction, the quick delivery of the machinery ordered, and, last but not least, has retained a deep sympathy for the American people.

The textile industry is beyond dispute the most important of all those of the district of the North. It endures, in fact, the manufacture of all common fibers: Wool, cotton, flax, hemp, jute, and even silk. The district of the North may be divided into two large divisions, which are quite distinct: that of the wool industry and that of the cotton industry, while the cotton industry is spread over both regions, though more concentrated in some places than in others.

LILLE THE LINEN CENTER

First rank in the flax industry is held by Lille, the capital of the province. It possessed before the war three-fourths of the 500,000 spindles and more than one-third of the 23,000 power looms and the 22,000 hand-looms that were in all France. The city itself had 106 textile mills of different kinds, the smaller places around Lille all together about 100. One of the specialties of Lille is the manufacture of linen sewing thread, with manufacturers of which have formed a syndicate for the purpose of guarding the interests of this special industry. Lille is also the seat of the very ancient association, "Comité Linier de France," whose purpose it is to watch over the interest of the industry which it represents and to improve the cultivation and manufacture of flax. Another is Armentiers with 64 different flax mills; Dunkirk, the seat of the jute and canvas manufacture, with 12 mills; Chambray and vicinity with 53 mills, and Valenciennes with 16 mills represent principally the manufacture of laces, lawn, and handkerchiefs. Taille and laces are manufactured in Cadry with 216 mills and Indich with 85 mills. We will also mention that the textile industries have a number of technical institutions of a high order: Societe Industrielle, the Industrial Institute in Lille, and the Professional School at Armentieres.

WOOL INDUSTRY IN ROUBAIX-COUCHES

The center of the wool industry is Roubaix, where just before the war about 40,000,000 pieces of textile fabrics of about 350,000,000 francs were produced, and the total amount of business transacted was not below one billion francs. It is hardly less important is its close neighbor, Tourcoing, with over 100 different mills, to which must be added a very large number of smaller mills nearby. Tourcoing is also the seat of the industrial and commercial societies for the protection of the interests of the district and of a professional school; in Roubaix, are three industrial schools. Also Fournier, with its adjacent villages is worth mentioning as an important center of the woolen industry. It may be said that there is hardly a single textile fabric that is not manufactured in this great industrial district.

(To be continued)

Assistant Inspector Wanted

WASHINGTON, Oct. 11.—In addition to the examination to be held on Nov. 7 for a warehouse inspector, the Civil Service Commission is announcing its intention of holding an examination on Nov. 14 for a warehouse inspector familiar with cotton and wool; the applicant must have had at least three years' experience in the management of a warehouse handling the above mentioned products, but he need not of necessity be a college graduate. Applicants must be within the ages of 21 and 40 years. The salary will range from $1,800 to $2,400.

* This is the first of a series of articles by Alfred Renoud, a French textile authority, writing exclusively for Textile World Journal. After describing the important conditions of the north of France as a textile center prior to the war, the author will describe the rapid production and the business possibilities that will be presented to American manufacturers of textile machinery and mill supplies after the war when the reconstruction and equipment of these plants are started.
TILTON MILLS INCORPORATED

Tilton (N.H.) Mills, as announced in these columns, have been purchased by Massachusetts landowner, with a capital of $135,000. A. S. Brown will continue as president; J. Murray Walker, of Boston, has been elected treasurer, and J. L. Eadie, agent. Mr. Eadie has for a number of years been general manager of the Pontiac Woolen Manufacturing Co., Pittsfield, Mass. No change will be made in production or selling agent.

SALE OF MERRIMACK FOUNDRY

Sale of the real estate, building and equipment of the Merrimack Foundry & Machine Co., Lawrence, Mass., is announced for Thursday, Oct. 26, upon the premises, under the supervision of J. E. Conant & Co., the Lowell, Mass., auctioneers. The real estate is comprised of thirty lots of land, with various frontages and areas. There is also included a standard steel and glass building, 90 by 200 feet (to be sold subject to the mortgage). Some 206 lots of machinery and mechanical equipment.

COTTON GOODS TRADE NOTE

The Amoskeag Manufacturing Co., of Manchester, N.H., recording selling agents, has placed staple gingham at value, at cost not over $8.50, without notice.
T. B. Terrell, secretary and treasurer of the Locke Cotton Mills, Concord, N. C., was seriously injured last Sunday evening when his car skidded while motoring between Concord and Concord, and overturned. Mr. Terrell, three ribs fractured with a lung punctured. His numerous friends are hoping for favorable news of an early recovery.

Superintendent W. M. Sherard, who only recently took charge of the Henriquez Cotton Mills, at Henrietta, Rutherford County, N. C., is actively assisting in the educational boom that struck this county last fall, and is being continued with vigor this fall. The revival of the "moonlight schools" is one of the main features of these schools. Nearly all the young people attending these schools are adults of mature age, who were denied opportunities to attend public schools in their early days, are now addressing themselves to the related task of regaining an education.

Supt. H. C. Greenlaw announces the retirement of George E. Pierce, of Fairhaven, Mass., as master mechanic at the Royal Mill in Riverside, R. I., in favor of Mr. John Bellamy, who has resigned.

S. A. Scott has accepted a position as night superintendent of the Adelaide Mill in Westfield, Mass. He is former superintendent of the Acores (Ga.) Mills.

M. Williams has been appointed superintendent of the Winsboro (S. C.) Mills. He comes from the Dillingham Mills Kings Mountain, N. C.

Mr. E. Riley has been promoted to superintendent of the Acores (Ga.) Mills, where he was formerly employed as foreman and spinner.

Charles E. Hartley, night superintendent for the Standard Spinning Co., Oswego, N. Y., has severed his connection with the company.

John T. Melbourne, for the past 46 years a resident of Stafford Springs, Conn., employed by the Palmyra Woolen Co., has taken a position as manager of the Palmyra Woolen Mills, Medway, Mass.

W. S. Trickett has been appointed superintendent of the Morris & Co., Inc., of the Hondale Mills (N. H.), from the Pennsboro Mills, Suncook, N. H. On leaving the Suncook Mill, he was presented by the overseers with a handsome traveling bag.

J. M. Hewitt, formerly superintendent of the Stevens Woolen Mill, South Bend, Ind., has accepted a position as superintendent of the South Bend (Ind.) Woolen Co.

J. M. Masson, superintendent of the South Bend Woolen Mills, has resigned his position with the company.

James L. Eades, general manager of the Wormser Woolen Mfg. Co., Pittsfield, Mass., has resigned his position with the company. He has been appointed manager of the Tilton (N. H.) Manufacturing Co., a new company recently incorporated, taking over the Titcomb Mfg. Co.

R. J. Puckett, formerly night superintendent of the Wilson Cotton Mills, Wilson, N. C., has been appointed night superintendent of the Necromont Mills, Cumberland, N. C.

Walter C. Nye has been appointed agent of the Putnam Manufacturing Co., Putnam, Conn., succeeding George A. Vaughn.

Winfield Beasley has been appointed superintendent of the Garner Print Works & Bleachery, at Wartburg’s Falls, N. Y. He is the son of Frank E. Beasley of Woonsocket, R. I., Mr. Beas- ley has been in the employ of the bleachery at Wartburg’s Falls for a number of years.

Pardon B. Sanford has resigned his position as superintendent (V. T.) for the Ulster Steam & Mohawk Valley Cotton Mills. He is succeeded by Edward Smith. Mr. Smith was formerly superintendent of the Utica Fine Yarn Corp., Utica, N. Y.

Samuel Taylor has been appointed superintendent of the Hothelaga Cotton Mill, Dominion Textile Co., Montreal, Canada.

F. D. Williams of Sylacauga, Ala., has been appointed as overseer for the Great Falls Co., Rockingham, N. C.

H. G. Forsyte has accepted a position as agent for the Almek Manufacturing Co., Bath, S. C. He was formerly with the Seminole Manufacturing Co., Clearwater, S. C.

Henry Gunton, formerly overseer of spinning at the Little River Mills, Rosenmont, N. C., has accepted a similar position at the Erwin Mill No. 4, West Durham, N. C.

Edward Hanson, formerly overseer at the mellon Co., the Merchiman Manufacturing Co., Lowell, Mass., but more recently overseer of the duck finishing department at the Boot Mills, Lowell, Mass., has taken a position as overseer of the finishing department for the Williamsville Manufacturing Co., Killingly, Conn.

Peter Oliver, formerly overseer of the duck and bag weaving department for the Boot Mills, Lowell, Mass., and more recently with the Tremont & Suffolk Mills of Lowell, Mass., as second hand in the weaving department, has taken a position as night overseer of weaving for the Jenkess Manufacturing Co., Pawtucket, R. I.

Thomas E. Foley has accepted a position as overseer of spinning for the Berkshire Woolen Co., Pittsfield, Mass., and as manager of the office for the Lawrence-Webster Co., Malone, N. Y., has resigned his position with the company to accept a similar one with the Malone Woolen Mills, J. O. Ballard Co., Malone, N. Y.

Martin F. Harding has resigned his position as overseer of carding for the John Roberts Woolen Mill, Claremont, N. H.

Daniel Simkins has accepted a position as second hand of ring spinning at the Chester (Pa.) Spinning Co. He comes from Millville, N. J.

J. W. Turnipseed, superintendent of the Aninston Manufacturing Co., An- niston, Ala., has returned to his duties at the mill, having been on an operation for appendicitis. His many friends are glad to hear of his recovery.
FINANCIAL MARKETS

STOCKS CLOSELY HELD

Most stockholders Anticipate Still Higher Prices

Boston, Oct. 11.—The comparatively small offerings of textile shares may be due to the fact that most stockholders are anticipating still higher prices.

The annual statements of most mills will show such an improvement in their financial condition that the stockholders are more than satisfied with the present share values and large numbers of them will pay extras, either in the shape of stock or cash dividends. Even if the outlook were not quite so promising as it now appears to be, it is doubtful if the shares are going to mark a decided increase in realized sales at current prices. The majority of textile shares will be on an investment basis and are well satisfied that there are few other investments that can combine in a more marked degree safety of investment as well as certainty of substantial dividends.

A part of the Fall River mills have already paid extras, and now one of the most conservatively managed mills in New England declares a dividend of one cent per share, a further addition to its annual regular dividend. This is the Everett Mills of Lawrence, Mass. Although this company has no charge for dividends, the regular dividend payment will enable the company to reduce the Lawrence strike; while the 4 per cent. paid on the 4 per cent. semiannual dividend will, at least, 50 cents per cent., is generally regarded as equivalent to the placing of this stock on a regular 8 per cent. annual rate.

There seems to be no doubt that the best showings among textile mills for the past months can be made by some of the yarn plants. Their adjustment to an advance price basis came earlier than that of the cloth mills, and they also worked out their low-priced contracts earlier than did the cloth manufacturers. As a result, they are now making bears no logical relation to the cost of production, and is largely due to the constant demand and, as it affects their product. There used to be a time when a spinner or twill mill could show a profit of $3 a spindle was hired by his competitors, but to-day he must make nearer $10 or $12 a spindle to become a member of the envied class. There are many mills that are doing as well as this, but of this number there are many who have the losses of several years to recoup, and who will use their extra earnings to increase their redness and to re-equip or to extend their plants instead of materially increasing their dividends. Ga.; this company has just increased its capital from $1,500,000 to $2,500,000, thus capitalizing a large increase in new machinery during the last two years and additional expansion is now in progress.

The sales of textile shares at the Boston auctions were

| Stock | Par | Sales
|------|-----|-----|
| Shaw Mill | 100 | 130
| Pepperell | 125 | 145
| H. C. Wadsworth | 130 | 135
| New England | 150 | 160
| Agawam | 175 | 190
| Fall River | 120 | 130
| M. Mass. | 130 | 135
| M. Mass. | 100 | 105
| Fall River | 120 | 130
| Merrimac (comm.) | 100 | 105
| Arlington | 100 | 110
| Granada | 120 | 125

*19%* Total.

Fall River Mill Stocks

Fall River, Mass., Oct. 12.—Trading in the local market for securities is quiet. It is not because of a lack of opportunities, but because of the absence of disposition on the part of holders of certificates. There is strong temptation to sell, but the hope of a further advance is so pervasive that those who do respond when the market offers say that it has not yet developed. In that supposition they find plenty of support.

HOPE FOR FURTHER ADVANCES

It is hard to come upon anyone who keeps tabs on the situation, who will admit that the limit of the rising tendency is within the field of observation. The pushing of prices away from the sign that the public is prepared to weigh manufacturing conditions and operations throughout the country, and to invest in stocks of large returns, or substantial appreciation with a view to taking profit when the increment is considered desirable. To listen to the most optimistic, their range of vision extends well into next year as the determining point at which they will consider offers for the shares are disposed to surrender at a price. The conditions, for the most part, of hope is the well-known fact that many looms are tied down by contracts which are to be completed toward the close of the calendar year, and the prophets of manufacturing profits insist that prosperity is going to be in full bloom in 1915. This year. One experiences the utmost difficulty, therefore, in effecting purchases of mills unless the person is prepared to subordinate his willingness to buy to the seller’s insistence on the maximum.

HIGH PRICES FOR CLOTH

A most potent argument in support of the contention of those who urge that prices of to-day are entirely disproportionate to values, both immediate and prospective is contained in the latest week’s report of business in the cloth market. It strengthened them and weakened those who say there is no reason to persist in haggling in the hopes of wringing concessions. The argument lay in the fact that many of the prices at which goods have been sold recently for delivery well into the future exceeded those of the boom period in 1907-1908. Quotations on shares reached the highest in local history. It is argued that those rates are not the result of the market should not be a repetition of the incident.

In order that the record in soaring might be duplicated, American Linen will have to go to 118, from 85; Arkwright from 78 to 112; Barnard from 58 to 113; Border City from 118 to 113; Coit from 114 to 115; Cut from 78 to 90; Cornell from 115 to 202; Davis from 122 to 125; Davol follows from 105; Granite from 150; Hargraves from 72% to 130; King Philip from 1425 to 178; Laurel Lake from 120 to 140; Lincoln from 137 to 157; Mechanics from 97 to 105; Narragansett from 102 to 142; Osborn from 108% to 105; Parker from 120 to 120; Pocasset from 100 to 150; Richard Borden from 170 to 180; Seacoast from 78 to 10; Shreve from 59 to 108; Stafford from 85 to 112; Union from 195 to 260; Wampumag from 80 to 1. Some stocks are even higher than they were at the time in question. Stevens did not get beyond 130; at present owners of shares are refusing 173. Of course, the fact that a stock dividend is anticipated does this effect. The annual meeting accounts partly for the abnormal rise, but back in April of this year a safety was effected at 1500, when it was only felt, not known, that this thing of importance in contemplation this year or next. Flim did not prevail this year’s level by any means. Points. Teumesh stands better by five points, the maximum before 1910 being 155. Although Tecumseh is paying a higher dividend this quarter than last, the quotation is two points under the high figure announced in August. Its boom price was 135. Merchants are better now at 115½ than it was when the market was in a state of fever. To everyone was pushing in order to take advantage of the big earnings. One of the operators in the market is that the dividend percentage is the Bourne. Where before it paid only 4½, its rate is now 6. The difference in quotation is as 10½% to 112. The annual meeting of stockholders is to take place next week. During the last twelve months ago there was an indebtedness of less than $3,000; this represented a reduction of $43,000, or 11½%, and the sumdisabled to the substantial reserve will operate in the report of Treasurer George Delano. Among the probabilities, in the judgement of some stockholders, is an increased rate. About the only basis for the action of the directors and the earnings of the past year.

Some persons affect to anticipate a further move in the stock market, through favorable showings of the various corporations. The fiscal year is ending. That it will prove to be highly lucrative is not doubt. More interest is centered on the reports of the corporations which have been paying of small dividends or passers than in reading the size of the earnings of the leaders in the cotton industry.

Textile Share Quotations

| Stock | Par | Sales
|------|-----|-----|
| American | 100 | 125
| American | 100 | 120
| American | 100 | 120
| American | 100 | 120
| American | 100 | 120
| American | 100 | 120
| American | 100 | 120
| American | 100 | 120
| American | 100 | 120
| American | 100 | 120

(Continued on page 62)
Woven in America

World conditions have brought into renewed prominence the very important position held by fabrics of American make. In reliability, in variety of selection, in correctness of style,—American Woolen Company's fabrics stand unrivalled. They are produced by an organization numbering more than forty mills equipped with the most modern facilities and giving employment to thousands of skilled employees.

American Woolen Company

Selling Agency
American Woolen Company of New York
18th to 19th Street, on Fourth Avenue
New York City
This Might Solve Your Problem

AN ADVERTISEMENT BY CHARLES E. CARPENTER

In moulding VIM Leather for certain products it is necessary to soak the leather in liquid wax.

Experience shows that 250° Fahr. is the proper temperature at which to keep the wax, but we had constant difficulty in keeping anything near a uniform temperature.

Either the temperature fell and then the wax was not hot enough to penetrate the pores of the leather, causing the leather to break in moulding, or else the wax became too hot and burnt the leather.

We had thermometers and folks to watch them, but once or twice every week the temperature would get away from us.

Houghton American System of Heat Control

(PATENTED)

It so happened that we purchased the American Regulator Co. of Pittsburgh and in March, 1916, we moved their plant to Philadelphia and located it in one of our own buildings, as a part of our Heating and Engineering Department.

It also came to pass that we happened to mention our wax troubles to Mr. C. E. Bonnet, Manager of our Heating and Engineering Department. We were surprised when he assured us that he could attach automatic heat control to our wax tanks and hold the temperature between 249 and 251°.

What is more, he did it. For months our troubles have been over and we have already saved many times the cost. It is a dependable apparatus that has thus far not required the slightest attention or repairs.

There are places around every mill where it is desirable to automatically control the temperature in a similar manner and where a large saving and improvement in quality of production could be effected.

If you have such a place, send us particulars.

Of course you know it is a paying investment to have the temperature of your work rooms and offices automatically controlled.

You also know that the control of humidity in your work rooms is just as essential, and our Heating and Engineering Department has a Hygrostat which will do this automatically. Perhaps it can be attached to the humidifying apparatus you already have installed. Write the Heating and Engineering Department and ask them.

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E. F. HOUGHTON & CO.

Publishers of The HOUGHTON LINE

Third and Somerset Sts., Philadelphia

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LOOMS

Every practical overseer, loom fixer and weaver knows that the

Crompton & Knowles Fancy Worsted Loom

is the best loom on the market, combining ease of operation with maximum production.

Crompton & Knowles Loom Works

WORCESTER, MASS.

Paterson, N. J. Office:—Citizens Trust Bldg.
Southern Representatives
Alexander & Garsed, Charlotte, N. C.
A mong several special fabrics, which are at the present time attracting attention, cloth is in the lead. Some idea of the manufacture of this cloth is given in the following illustrations. The fabric is being sold at $3.50 to $7 per yard, 6/4 wide. In appearance, the fabric resembles chintz, but where the chintz is a wooden cloth soft, rich, if somewhat dull finish, Bolivia is a Worsted fabric, with a lively color and bright lustre finish. The curl on the Bolivia will last much longer. The sample before us weighs 15½ ounces per yard, on a basis of 57 to 58 inches width.

**Warp Particulars.** The warp contains 46 to 48 ends to the inch in the finished cloth, which gives a total of 2,772 ends in the full warp. The count of the yarn is 2/60, and in our judgment was made on the Bradford system. It seems superfluous to advise the use of a first-class warp yarn, but having in memory an instance within your own knowledge where a mill was using 2/60 from three different yarn spinners, where one of the three yarns was of outstanding excellence with correspondingly good results in weaving, we should advise that quality be considered first and price second, for in the case mentioned the highest priced yarn was by far the coarsest and the best finished cloth. Better dressing and weaving, greater production, much less haring and sewing; all these advantages by far overcome the difference in the cost of the yarn per pound. This applies to all yarns, but particularly so to yarns of such high counts as 2/60. A warp made of 2/60 can be run without sizing. A 1 is a well spun yarn, but better results can be obtained by sizing. More weight and stiffness in sizing do not necessarily mean better weaving, in fact, they very frequently result in poorer weaving. The best results are obtained by a light size, which just lays the fiber, and renders it more compact, thus reducing friction, without impairing the yarn's natural elasticity.

In a mill of considerable size, and spinning its own yarn, the warp for Bolivia cloth would probably be prepared by the cotton slasher system, where the yarn is put on section beams, and a large number of cuts run on to looms without twisting. Under the Bradford system, full broad warps are run in succession through the slasher, sized, dried and beam ed, on one operation. The average mill on worsted work lays the yarn required from a spinner and in all probability such yarns would be delivered on dresser spools with any number of ends on the spool according to the wants and convenience of the weaver. In this instance, 36 ends per spool seems a convenient number. The warp of 2/60 would be run in 7 sections of 396 ends each, taking 11 spools to a section. The average size of the warp at all, uses a sizing dresser, and this number of ends to a section (396) would permit of a fair rapport in dressing, and at the same time allow the yarn to be well dried before it leaves the drying chamber, and is run on to the reel. In some mills the warps are dressed and dried in the air and then run through a sizing slasher on to another beam, which method permits of a larger production. In our opinion, however, a warp yarn suitable for this Bolivia fabric can be obtained, which may be used without sizing.

The warp should be put on the beam about 76 inches wide. In beaming, particular care should be exercised against

![FIG. 1](image1)

Possibilities in Fancy Effects—Difficult to imitate in Cheaper Fabrics

By RETLAW

![FIG. 2](image2)

The foundation weave is the ordinary harness twill, with the twist running to the right as shown in Fig. 1. The pile warp is of a specially constructed float arrangement, covering 18 harnesses, as shown in Fig. 2. The piling is shown in Fig. 3, and this is also the harness end. It is held by only a few threads at intervals, and around these few ends the pile filling is curled. The warp chain is of compound construction, consisting of a base or foundation weave with warp and filling, and also a pile filling weave, which is to cut and so treated in the finishing as to form the small curl on the face of the cloth.

Drawing-in

The draft is straight over 18 harnesses, which calls for 154 heddles on each harness. A reed with 12½ dents to the inch is called for, with three threads in each dent. This will give a width in the reed of practically 74 inches, and care should be taken to see that the warp occupies the center of the reed.

In setting in the loom, see that harnesses are led and hung evenly at both ends. The jacks should be set so that the lower jack at its maximum of separation rests lightly on the race plate. See that the beam spokes rest in well oiled bearings; that the friction hands are well covered with cloth, and that in no place has the cloth been worn through, permitting the contact of the metal of the hand with the metal of the beam friction brake. Ordinarily, little or no attention is paid to the spoke bearings of the whiproll. These should be well oiled, so that the whip

![FIG. 3](image3)

roll can effectively play the part for which it is intended, viz., easing the warp at the heating-in of the pick, and the strain of the changing of the shed. **Weave.**

It is a most important matter to ascertain the interlacings of this weave, as in the finishing process the pile filling has been so thoroughly cut that it is free from the greater number of the

![FIG. 4](image4)

Possibilities in Fancy Effects—Difficult to imitate in Cheaper Fabrics

By RETLAW

Making a 2-ply slacker twist, putting in on the reverse twist just enough turns to form a soft thread, not more than 3 or 4 turns per inch, making a soft bulky yarn, readily susceptible to the process of cutting by gigging, which forms an important part of the finishing. Particular care should be given to the adjustment of the filling stop motion, for the filling of the foundation weave cannot be seen by the weaver. It goes on the back of the cloth. Mistakes and broken picks cannot be detected, except by the stop motion. While as a rule, imperfections on the back of a cloth are not considered as very detrimental in ordinary fabrics, in the case of such a high priced fabric as Bolivia, perfection is desirable both on face and back.

Few mills care to take up the manufacture of such a fabric as this, because of the very high number of picks per inch for which it calls, viz., 130. A production of 10 to 12 yards per day would be considered good. The estimated cost of this fabric is $2.58, and the mill may get a profit of 90c per yard, a profit of 60c per yard per day. Combined with another special novelty, of which the writer has knowledge, it is taking around $2.25 at the present time which a profit of 30c per yard is obtained. The second fabric calls for only 24 picks per inch, and comes from the loom at the rate of 40 to 50 yards per day, a profit of $12 per loom per day. However, it is a question of proportion, the mill should ask and we believe may obtain, a higher profit per yard for specially high pick fabrics.

**Finishing Processes.**

The cloth comes from the loom weighing 20 ounces, according to calculations, but may vary between 19 and 21, the threading not being perched, measured and weighed, it enters upon the finishing processes. The first of these is burling and sewing. There should be very little of either on such a fabric. The pieces should be cleared of ends and prominent knots on the face, burling on the back, the toots drawn up and cut off, leaving ends sufficiently long to make up for the stretch effected in subsequent handling.

This Bolivia cloth is not fulled or milled. Only a good scouring with a good soap is required, and care should be observed, that the water is not warmer than can be comfortably borne on the hands. Too heavy a soap, and water too warm, will cause felting to an objectionable degree. Before scouring, the pieces should be tacked in place, with the cloth in place with the finished selvage. Extra care should be taken to get rid of every trace of soap, and to wash the cloth, where the goods should again be examined. In dyeing the pieces should again be tacked at the selvage, and then washed out.

After dyeing, the pieces should be
Proved by test—and the experience of over 3,000 manufacturers

There are just two kinds of tests that mean anything to the manufacturer. The first is the experience of other manufacturers. The other is the actual scientific test that gives a positive, definite result.

Every comparative test made has proved that “Barreled Sunlight”—Rice’s Gloss Mill White—is the most efficient treatment for factory and mill interiors.

Where lead and oil paints have turned yellow, Rice’s has remained white; where mill whites containing varnish have yellowed, cracked and chipped, Rice’s has remained white and intact; where cold water paints have peeled and have had to be constantly redone, Rice’s has kept its perfect glossy surface; where others require repainting, Rice’s needs only be washed to make it clean as new.

When it’s time to repaint the interior of your plant, profit by the experience of over 3,000 other plant owners—treat your ceilings and walls with Rice’s Gloss Mill White. You will save money in the end.

On Concrete Surfaces—Rice’s Granolith makes the best possible primer for “Barreled Sunlight,” retarding the progress of moisture in the Wall—Rice’s GRANOLITH.

Write for our Booklet “More Light” and Sample Board.

U.S. GUTTA PERCHA PAINT CO., 20 Dudley Street, Providence, R. I.

THE ORIGINAL—THERE IS NO SUBSTITUTE

You Can Save Time and Prevent Costly Inaccuracies In Counting Fabrics and Mountings

WITH A NATIONAL COUNTING MACHINE

The National Counting Machine saves labor and hours in many mills by counting rolls containing thousands of articles of textile manufacture, also small metal and bone mountings—any material in like units. It counts Yarn, cord, canvas, huck, canvas, felt, rubber, tape, linoleum, kerosene wicks and paper, and insulators and rubbers. Any mill can save from 50 to 90 per cent of the cost of hand-counting. It counts 1000 per cent faster than hand and mind.

WITH the National Counting Machine a single operation that your clerical labor can perform takes the place of the usual laborious handling and uncertain results.

Twenty-two models—suitable to handle any counting problem—are shown in our Illustrated Catalog 146 which will be sent to you on request.

NATIONAL SCALE CO.
10 Bridge Street
Chicopee Falls, Mass.

Also Builders of National- Chapman Elevating Trucks

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REMEMBER IT’S WATERPROOF

MEANS PROTECTION PRESERVATION PERMANENCE

LIQUID KONKERIT

For Brick, Stone, Stucco and Concrete Walls

A damp-proof, weather-resisting coating, protecting walls from the disintegrating influence of the elements, preventing efflorescence and imparting a uniform and more pleasing appearance in any color to the surface.

Always used over L.K. Primer, which neutralizes the lime inherent in all cement, stucco and concrete.

Write Dept. U for the Liquid Konkerit Booklet.

TOCH BROTHERS
Technical and Scientific Paint Makers Since 1849
320 Fifth Avenue, New York
Works: New York; London, England; Toronto, Ont., Canada
After dying, the pieces should be dried and again inspected, then taken to the gie, where the finishing must be cut open, to form the material for the small curls. This finishing should be carefully done. No attempt should be made to break records of production at this point. Violent work, with speed in view, would undo the best that has been done on the face of the cloth, and all depends on the good judgment of the man in charge. The gieg should be continued until the floated filling is cut clean through to the foundation weave.

The pieces should then be placed on a whipling machine, such as is used for high grade chinchillas, and beaten on the back to remove the cut pile. The next step is to top off with the shear, but this is not absolutely necessary.

The piece should then be put through a regular chinchilla machine to curl up the pile. A shearing machine should be used to cover the upper rub motion, while a good corduroy may be used for the bed of the machine. Once through the machine the pigment to be sufficient, as the chinchilla moh is not wanted in the case. This process is required only to give a curled direction or tendency to the pile.

The piece is then taken to the shear, and the mohb effect shown off gradually until only the small curl effect remains; and at the same time the longitudinal indentation should appear, forming the rib effect. The appearance of this indentation should guide the man at the shears as to the extent to which the shearing process should be carried. Again this last shearing ought to be a careful, gradual process. The piece can now be inspected, rolled, weighed and shipped.

This fabric will lose considerable weight in the finishing processes, for in addition to the usual loss, the napping and shearing will remove an unusual amount of fiber. The piece ought to weigh 20 ounces per yard from the loom. The pile fillings will lose a large percentage of fiber, and the total loss may be place at 18 per cent, which reduces the weight per yard to 16.4/10 ounces. In addition to this, there must be taken into account the fact that the fabric gains in length in finishing, at least 5 per cent, possibly 7 per cent, which will still further reduce the weight per yard and make it 15½ ounces finished.

**LAYOUT AND COST**

The layout and cost are as follows:

- 2½ lbs. ends warp, 3½ lbs. white worsted, Bradford system.
- 12½ x 5:2 nibs — 33 lb. inches wide over all.
- 13½ pick confusion — 1:2½ inches French spun worsted and 1 inch black twist.
- 2½ oz. enm. 14/4 oz. @ $1.12 per lb. — 5321
- 1 lb. enm. 14/2 oz. @ $1.12 per lb. — 6632
- 12 oz. enm. 14/1 oz. @ $1.12 per lb. — 8072
- 1 lb. enm. 14/1 oz. @ $1.12 per lb. — 8072
- 1 lb. enm. 14/1 oz. @ $1.12 per lb. — 8072

**Receipt of materials:** $1.79

**Cost per yard:** $0.697

**Allow for gain in length of 5 per cent:** 102

**Cost per yard:** $0.697

Some manufacturers contend that a gain in length should not be taken into consideration in calculating cost, but the same men would never dream of omitting to take into account any shrinkage, so we hold that so long as the gain is regular an allowance in calculating cost should be made.

**POSSIBILITIES OF DEVELOPMENT**

Bolivia fabric should lend itself very readily to fine fancy effects. For example, a black base filling for warp and 3, 2/4s diamond filling for the 4, 5, 6, 7, 10, 12; a dark blue 2/24s pile yarn on bars 1, 3, 7, 9; and a dark wine or green 2/24s pile yarn on bars 5 and 11, would give an effective color stripe effect.

With black warp and black filling for foundation weave, and making changes on the pick, from 1½ inch all the way up to 1 inch, a variety of beautiful colorings and styles could be developed.

**Details of Manufacture of Spin silk Yarns**

**Preparation of Spin Silk Yarns for Weaving Mills**

*By J. W. HOLLAS*

Side tight, the other side slack, causing a lot of snarls and variations in the weight of the sliver at the finishing level.

It is also highly essential that the machine be not overloaded. The writer prefers to run on the light side. With the double thread screws and patent disc cards that are made in the United States, and the machines properly set, they can be run at high speed, allowing a lighter sliver in the machine, also getting more weight through than with the single screw. Roving tubes or bobbins should be emaciated so that the oil will not soak through, for if a single roving is run on a plain bobbin the silk will draw the oil out of the wood.

**Preparation and Knitting Mills—Conditioning**

*By J. W. HOLLAS*

**SPINNING SPOOL FRAME**

A spinning frame with a small bottom draft roller will make more evenly spun yarn than a frame with a large diameter draft roller. Yarn spun on a small diameter draft roller with a suitable draft will have a better feel and be more like a mule spun yarn, and when woven into a piece will make a fuller cloth. The most suitable drafts for spinning silk are from 10 to 12; if the draft exceeds 15 the yarn deteriorates in quality. By putting a finer bank roving in the spinning frame and running with a suitable draft, much more satisfactory results will be obtained.

Taken all round, a spinning frame with the spindles driven by tapes and with tension guides, beside suitable equipment, preventing slack twist.

The writer has found it better to increase the speed of the roving shaft or motor than to run the main shaft at low speed and have large cylinder bobbins, besides saving space. The thread guides should be directly over the top of the spindle, so that the thread fly evenly, before laying on the bobbin.

If the yarn is to be single, it is wound on cops ready for the looms. If for two or three-ply yarn the spinning bobbins are taken to the winding frame where the ends are doubled. The thread from 8 to 12 spinning bobbins can be wound on one winding bobbin, and it will be found that this process saves a lot of waste, and more spindles can be kept running on the twisting frame than if twisting direct from the spinning bobbin. Care should be taken in tying the ends, using a weaver's knot with no long ends hanging, which must be trimmed off when sorting. The twisting frame spindles run in the opposite direction to the spinning spindles, so if spinning to the left, the two-ply is twisted to the right.

*Continued from issue of Sept. 25*
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Different Types for Different Uses

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If you contemplate adding a new process or machine to your finishing plant, our unusual experience is worth consulting.

Whether you buy our machinery or not, we will freely give you all the information in our power.

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Established 1820
Providence office, Turk's Head Bldg.
PHILADELPHIA

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§ Sixty-seven years of successful manufacturing in any line is a pretty good assurance of a meritorious product.

§ Since 1849 we have been manufacturing mill and machine brushes for every textile requirement.

§ And this record is but the foundation upon which we plan to build an even more successful future.

§ But doesn’t it warrant your investigating right now the reason for this long continued and constantly increasing popularity of Mason Brushes?

§ A trial order will tell the story.

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There is an old saying that “You cannot do two things at one time.” But the user of

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does more than two things at once. He reduces his cost, improves the appearance of his work and retains, unimpaired, all the natural properties of the wool.

Is not this sufficient, Mr. Non-user of this product, to induce you to give it a trial? Order from your supply house.

The J. B. Ford Co.
Sole Mnfrs.

Wyandotte, Mich.

This Soda has been awarded the highest prize wherever exhibited.
the thread laid around the runners on the bar. The yarn has had better success with porcelain curlers, as steel runners get too dry and cause ends to break. The thread is then passed through the gas flame, which burns off the nips. The friction caused by the thread running around the runners loosens the nips and rolls, and the gas flame burns all these loose particles from the yarn. After the yarn has been passed through the flame it is given a few more turns around the runners to polish it, and then wound onto a bobbin. Usually a two-ply yarn requires about four passes on the gassing frame, but lower qualities require more. A heavy count of yarn will stand more runners or friction than a fine count. The operator must be impressed with the importance of giving all the ends the same number of laps around the runners, otherwise the work will look nubby and dirty in some places, while in other places it will look clean. It is a good plan to have the gassing bobbins painted different colors on the ends to determine the number of the pass or operation: for example, first pass, plain bobbins; second pass, blue bobbins; third pass, red ends: fourth pass, white ends. If any bobbin goes astray the color of the bobbin redetermines which pass or lot it belongs to.

Yarn will lose from 4 to 8 per cent. in gassing, according to quality, so that a thicker count must be spun to allow for loss. Take a 2-60s composed of two ends of 120s twisted together. This yarn would be spun to 144. Twisting two ends would give 114.14 = 2 = 2-57s counts. This when gassed and washed would be about 2-60s. When gassing, the thread is stretched very tight, and when wrapping to take the size of yarn from a gassing bobbin, allow 5 per cent. for the stretch, for when the yarn is washed and conditioned again it will shrink 5 per cent.

**REELING THE YARN**

The gassing bobbins are taken to the reel, which winds the thread into skeins or hanks. The reel has a catch arrangement, and when 840 yards have been wound it stops, so that in each skein there are 840 yards. Whatever counts are being reelcd there will be that number of skeins, each 840 yards to the pound. For example, if 2-50s is being reeled, there will be 50 skeins of 840 yards each to the pound.

The operator, after 840 yards of 2-50s has been wound and the reel has been sealed off, he must wind a warp of yarn for the loom. Usually it can be easily found again and then threads tie yarn through two other places in the skein. This keeps the thread in the skein straight, and it is easy to find the center of the skein. When the tie yarn has been put in five off and putting in a hydro-extractor, and from there putting into a dying machine. This method often causes a lot of tangled yarn, which is hard to rewind on bobbins. The writer has found the following method to give the best results: Have an iron tub in which to prepare the liquor, fill this tub nearly full of water, add one pound of good quality soap, also two pounds of good olive oil soap, as this is good for the silk at this stage. Boil the water by blowing steam into it, until all the soap is dissolved. Then run the water into a V-shaped trough, about 14 inches deep, with ends made high enough to hold a square roller, and a notch at the top of the ends high enough so that when the yarn is put on the roller the silk is 2 inches below the water.

When the roller is full of yarn, lift it into a notch about 6 inches lower. This will let the silk hang in the water. Now turn the handle forward a few times, and then backward a few times until the yarn has had a good wetting. Then lift the square roller into the top notch again, take the yarn off, place it in a hydro-extractor, run a few minutes, then place in yarn drying machine or hang up in dry house. The yarn is then taken to the shaking out pole. This is a pole with stout wooden ends extending and made very smooth. The yarn is placed on these arms, then one knot is tied a time, and the arms are pulled out by taking another short, round piece of roller about 14 inches long, putting it through the yarn, giving a few pulls, and shaking. It is surprising the amount of dust this will shake out of the yarn, and this also serves to open up the twist, leaving it nice and soft, ready for the conditioning room. Yarn shaken out, as dried above is put into a lot of dust from accumulating in the equipment used in weaving and knitting.

**CONDITIONING YARN**

After the yarn is thoroughly dry it is put in the conditioning room and allowed to take up about 11 per cent. of moisture. Anything above 11 per cent. is excessive moisture, and it is allowed to take up natural moisture the appearance of the yarn is improved, giving a better handle than if dampened down.

If the yarn is to be sold in the hank or skein it is made into ten-pound bundles, as described above. The hanks are placed in a banding press, then pressed very tightly, tied up with twine and made into neat bundles for shipment. If the yarn is to be used for warping it is taken to the hank winders and wound on to warping bobbins. These bobbins are then placed in a creel, and the yarn run on to a warping frame to make the necessary number of ends and length for the loom.

**Wool Combing and Variation in Pin Setting**

**Particulars of Circles—Open Space—Shapes of Pins—Re-Pinning—Tension in Combing**

BY TEXUS

COMBS are primarily fiber sorters, compelling long fibers to go in one direction, and short fibers in another; and secondly they are combers or separators of individual fibers. In placing the functions of these machines in this order, regard is paid to the difficulty which the wool comb inventors had in solving the removal of the short fibers. In fact, so far as the combing between fibers is concerned, the gill-box is ideal in its method. These also have studied how the wool fibers are pierced and combed through by the fallers, while the back rollers hold the material, and the pulling of the wool through the pins at the front rollers.

**DETAILS OF NOBLE COMB CIRCLES FOR 418 BOTANY**

<table>
<thead>
<tr>
<th>No. of row of pins, per inch</th>
<th>R.W.G.</th>
<th>Space occupied</th>
<th>Space between</th>
<th>Approx. forced for</th>
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**COMBOCIR**

*From the Wool Record,*

There is a great deal of variation in the pin setting of wool combs. It is important to notice that the invention of the gill box was contemporaneous with the invention of the four principal combs for wool. Also that in all the specifications and references to wool combs in their early development there is no mention of either carding machines or gill-box combinations and the combing machine was fashioned and intended to deal with wool as it left the wool-wash and went to preparation. Whatever was done 20 years ago in wool combing, it can be said that as far as picking machines are concerned, carding and gilling, though subsidiary to combing, are indispensable operations.

**FINE MODERN PINNING**

Pins are common to all wool combs. In the days of the old hand-comb the pins were 12 inches long, fairly thick and strong, and few in number. To obtain any degree of hold to the fiber, the hand-comber had to make many lashings and combings on the
LUNKENHEIMER
"Ferrenewo"
Valves

Globe, Angle, Cross and Check Patterns, for Working Steam Pressures up to 150 Pounds.

The Original; practical in design and durable. The body of the "Ferrenewo" is made of a Special High-tensile Ferrous Material formulated in our own laboratories particularly for this valve, and is far superior in strength and durability to the grades of Cast Iron used byimitators.

It is supplied with the well known Lunkemenier "Seat-guard" which materially aids in preserving the seating faces and keeping them clean. The Union connection between body and hub, with threads where steam cannot reach them, permits of easy access to the interior for inspection or reglazing and the renewal of any part including the Nickel Seat and Disc. Uniform metal distribution gives maximum strength to all parts; threads are long and cut perfectly true; workmanship is Lunkemenier "Quality." Made in ½ to 2-inch sizes; screw ends only.

Specify and insist on having the genuine. Your local dealer can furnish them; if not, write us. Write for Booklet No. 567-ED.

THE LUNKENHEIMER CO.
Largest Manufacturers of High Grade Engineering Specialties in the World
CINCINNATI
New York Chicago Boston London

Drys stock evenly and uniformly—leaving it in better condition for future operations. Constructed of steel throughout and insulated with asbestos. No wire aprons.

ABSOLUTELY FIRE PROOF

For drying Wool, Cotton, Hair, Rugs, etc.

Agitating Table Dryer
(Write for Bulletin M 82)

Other Hunter machines are the Model D Wool Washer, No. 10 Fulling Mill, Garnett Machine, Model G Cloth Washer—each a leader for efficiency.

JAMES HUNTER MACHINE CO.
NORTH ADAMS
MASS.

THE KEMP AUTOMATIC GAS SYSTEM

Provides a means of heating tentering machines, dryers and the like with air heated to any desired temperature from 350° to 900° F. and discharged against the goods without use of fan or compressor. All steam radiation is done away with, output increased, finish the best, gas consumption cut in half. Where the Kemp System is in use, the cost of this attachment to tentering and drying machines is trivial. The best singeing at low fuel cost. Results guaranteed. Equipment furnished on approval.

An Established Reputation—
What does our 30 years experience in pipe bending and coiling mean to you?

It means just this—
You place every confidence in

NATIONAL
COILS AND BENDS

for our knowledge of the art and our equipment for bending, welding and brazing insure smooth, perfect bends every time—no flats, no wrinkles, nothing to interfere with perfect circulation.

Send us your requirements—blueprints or sketches. We'll send you our estimate. With our equipment we are limited in size only by what the transportation companies will handle.

The National Pipe Bending Co.
171 River Street, New Haven, Conn.
same batch of fibers, which was inevitable considering the scarcity of pins and the wide spaces between them. Present day combs have so many pins per inch, and so many rows of pins, that one passage of the width of the comb under the comb, which could be cut at one operation, effectively comb the fibers so that two fibers do not lie together, regardless of which comb it is. Fiber separation is imperative if fiber distribution is to be successful in the drawing and spinning. The more effectively it is done, the greater the likelihood of making fine and level yarn.

**WOOL COMB DETAILS**

Wool combs are often too willing to allow the wool comb makers to supply them with combs, the details of which have been determined by the comb maker himself. These may be suitable or not, but are always built with regard to the particular work for which the comb is intended. The wool comber, who should know what is required to give him the best result, is not satisfied with any comb makers do not meet trade requirement, but it is obvious that their will be to serve the combers deplanes the latter of much useful thought, so much, in fact, that very few combers consider the contents self-evident. Circles beyond the number of rows of pins and the number of pins per inch of the finer rows. These latter particularities of the comb maker must form the standard of pinning.

For instance, wool comb makers supply four types of comb circles for Noble combs, recommended respectively for English long wool, low crossed, fine crossed, and botany. These have been proved to be suitable for clearing the wool, and consistent with this, allowing for the maximum production. The density and size of pins used are those which were in vogue a generation ago, and it is supposed that much time, thought and skill were requisitioned before satisfactory circles were produced. It is intended to examine the pinning of Noble comb circles for combing botany wool, and to questioning one’s reason whether we have the best possible arrangement for fiber separation and productivity. The difference between the pinning of the two sets of pins for attractive large and small circles.

**LARGE AND SMALL CIRCLES**

In the principle of combing as adapted here, the set over in each circle need not be similar. But there is also a variation in the pinning of these.

**COMBING FINE AND COARSE WOOLS**

Combing Fine and Coarse Wools

Technical Editor:

1. Are there any set rules for the combing of both fine and coarse wools? For instance, the worsted weaving yarn? For example, the end comes from the card in the fall form. Should it be the same for both fine and coarse wool?

2. Is there a standard brush to be used when combing both fine and coarse wool?

3. How many times should a double brush be used per inch to be up to the right speed?

4. How many revolutions should the circle or comb make per minute for fine, 5% wool; 8% wool; 10% wool; and fine wool?

5. Does it depend on anything but the content of the set from the card?

6. Should the comb take out or make a good clean slice when used on 20 mm. combs? If so, when is the card in fine condition?

7. What is the ratio of combing fine and coarse wools when the comb is from the card in fine condition?

8. Does the comb take out a good clean slice when used on 20 mm. combs? If so, when is the card in fine condition?

**BOOKS ON DYEING**

**TEXTILE PATENTS**

**Weftless fabrics**. Method and apparatus for the continuous production of Textile materials. TREATING, 119.996. Raymond B. Price, Mishawaka, Ind.

Wooll, lisle and other animal fibers, as well as fabrics of all kinds and the products thereof. TREATING, 119.996. Herbert P. Jefferson, Boston, Mass.

**SPINNING WOOL AND A COTTON THREAD**

An auxiliary yarn guide for use on frames making yarn by passage a work.

**QUESTIONS AND ANSWERS DEPARTMENT**

**CONSUMPTION OF OIL AND GREASE**

**TEXTILE PATENTS**

**Consumption of grease and oil**

**TEXTILE PATENTS**

**FABRICS**

**COTTON WARP STITCHES**

**MAKING STEAMER RUGS**

**TECHNICAL EDITOR**

[Continued on page 45]
CONVERSE, STANTON & CO.
Commission Merchants
83-85 WORTH STREET, NEW YORK
Bleached and Brown Sheetings, Lonsdale Hollands, Worsted, Woolens and Shirting Flannels, Towels, Quilts, Damask and Blankets
BOSTON: 62 Franklin St.      PHILADELPHIA: 319 Bourse

J. P. STEVENS & CO.
Commission Merchants
23 Thomas Street      229 Fourth Avenue
NEW YORK

SCHEFER, SCHRAMM & VOGEL
Commission Merchants and Mercantile Bankers
315 FOURTH AVENUE, NEW YORK
Southeast Corner 24th Street
Finance Manufacturers' Accounts, Selling Direct or Through Agents, Discount and Guarantee Sales

W. Stursberg, Schell & Co.
Commission Merchants and Mercantile Bankers
Finance Manufacturers, Selling Direct or Through Agents
Everett Building, 45 East 17th Street
NEW YORK

HOCKANUM ASSOCIATION
FINE WORSTEDS AND WOOLENS
HOCKANUM COMPANY      THE NEW ENGLAND COMPANY
THE SPRINGVILLE MFG. CO.      MENTERBURN MILLS COMPANY
334 FOURTH AVENUE, NEW YORK

M. STEINTHAL & CO.
319 GREENE ST., N. Y.
CLOTH SAMPLES CUT, LABELED, NUMBERED, BOUND, PRESSER AND BOOKED
Sample Cards of Every Description
Piece Goods Tickets, Gum Labels
Pin Tickets, Fasteners

W. H. DUVAL & CO.
Men's Wear, Cloakings, Broadcloths
225 Fourth Avenue      NEW YORK

PERSEVERANCE WORSTED COMPANY
WOONSOCKET, R. I.
FINE FANCY WORSTEDS
SALESROOMS: 25 MADISON AVENUE, NEW YORK

DEERING, MILLIKEN & CO.
Dry Goods Commission Merchants
NEW YORK      BOSTON      CHICAGO

RICHARDSON BROTHERS
51 & 53 FRANKLIN ST., NEW YORK
TEXTILE WRAPPERS, TWINES, ETC.
"ROYAL" PRESS PAPERS
FOR FINISHERS OF
COTTONS, WOOLENS AND SILKS

D. R. KENYON & SON
Raritan, N. J.
MANUFACTURERS OF
Tentering and Drying Machines
CRABBING MACHINES, FULLING MILL
CLOTH WASHERS, DYEING MACHINES AND
CHINCILLA MACHINES

MAIL THIS TO-DAY—
HOWE MILL CRAYON CO., Lowell, Mass.
Please send us samples and prices of the crayons you claim are superior to any on the market for all uses in textile mills.
WOOL MANUFACTURES

MACKINAW'S HOLD WELL IN MEN'S WEAR MARKET

Good Trade in This Line Taken as Fore- shadowing Excellent Business

Mackinaws are again the most prominent feature of the men's wear market this week, although the advent of so many holidays in the week has tended to slow up trade. Columbus Day and a Thursday which come in the week during the last extreme short time for business. Mackinaws, though, have been getting along as well as expected, and it seems probable that before the season is out they will be unusually plentifully supplied to the market right in regard to style and price, and there are few who have not got good deals. Many of the dealers are finding that the goods are going almost as fast as they are offered. On the whole, if mackinaws may be taken as any indication, we may forecast a general condition of the coming heavy-weight season, it seems that business in by-weight goods is not going back very badly.

PRICES AGAIN DISCUSSED

It seems to be the opinion of many prominent individuals in the trade that prices for next season will be considerably high in the opinion of the buyer. So far, there does not seem to be any relief in sight or any chance of prices being lower. Everything connected with the woolen and worsted business has gone up in price, and although a short time ago it was rumored that the dye situation was becoming cheaper, it seems now that this statement was entirely without foundation. It seems that in all probability the price will be the same as it was at some extent last season, an effort on the part of certain buyers to force the market down by a failure to buy. Those who are in position to know, however, say that goods are really going out of the market at a reasonable figure, and that it is virtually impossible for mills to do any better in regard to prices.

STRIKE

As was the case last week, it is hard to obtain at present any definite or authoritative report on the present situation of the spinners' strike. From the information that could be obtained, it was learned that the Allen brothers were working in nearly all, if not all, of the mills. The two contentions on which the strike was based were a $15 per week minimum wage and the recognition of the union. The only real stumbling block was the "recognition of the union" clause, for few of the men were making less than $18 a week at the time of the walkout. No recognition of the union was granted by the mills, and the men are evidently at work again.

DRESS GOODS SLOWER BUT ALREADY WELL SOLD

Coatings, Staples, and Semi-Staples, Still in Fair Demand, Cardinals and Poples Lead

There is little change in the condition of the trade in all these classes since last week's report, although it may be said that the market has slowed up to a certain extent. There seems to have been a definite trend to a slowly moving market and many coats are almost sold out. Retailers have expressed themselves as extremely well satisfied with the way in which goods were sold so far this year, and the holders of surpluses seem to be the only ones who have suffered in any degree. Skirtings and coatings have gone well and for those kinds of fabrics which are not the fancy of the buyer there is a greater demand than supply.

KNITTED COATINGS SELLING

Last week there was still a fair demand in the knitted suit market, but knitted coatings are going extremely well. Knit goods seem daily becoming greater popularity. Many prominent makers of women's wear and dress goods are installing knitting machinery in their mills in anticipation of the rush which will all feel sure will come. The fact that all kinds of sales have been extremely popular this year has caused many handlers of knit goods to concentrate their attention on coating, and a great many novelty knit coatings are on the market. Next season seems as present indications would suggest, to be entirely a knit goods season. This class of goods combines great warmth with beauty, and consumers have evidently at face alone should make it popular.

STAPLE SELLING STILL BETTER

As was described last week, staples and semi-staples are more in demand and seem to be infringing on the popularity of fancies. Fabrics after a poor start have had a good season, but now staple goods seem to have the call. Fine twill gabardines and poples are the most popular just at present, but many dealers think that a general rush on staples is just around the corner. Staple coatings are selling well and the difficulty is to find a mill that is not already sold out.

REPUBLICAN VICTORY EXPECTED

All through the women's wear market there is a growing feeling of confidence that the next administration will be Republican. It may seem that the woolen or worsted business is a poor place to draw an opinion from, but one man who comes in touch with nearly every business in the country says that the only thing he finds is that New York State is the Republican sentiment. It is here that the foreest battle will be, and an opinion is almost sure to be the case.

ADVANCE IN PRICE QUANTITY

There has been a complaint made to the managers that the prices are rather high, but now that cold weather has come, it seems likely that spot overcoatings will be in demand. A large number of coats are in speaking in a general way of overcoatings recently, said that the big seller for next year will be a narrow, pinched-back coat with a convertible collar. This will tend to cut down the yardage required, and it is believed that no. should make them cheaper to some extent.

COTTON WILL BE MORE WANTED

The sentiment is growing stronger every day, that next season will see a remarkable sale for cotton worsteds and manufactured goods of all kinds. The high prices of wool and worsted fabric will make cotton goods a necessity, although it is not expected that they will be comparatively as cheap as they were this year. Cotton has advanced to an alarming degree, but nevertheless does not at all approach the price of wool and worsted.

Men's Wear Trade Notes

Mackinaws are receiving a large amount of attention on the men's wear market, and from all reports they are selling extremely well. The season's prices will be extraordinarily high; in fact, they will be almost out of the reach of the trade. The wide-seated trousers will be a remedy for this state of affairs so far he is keeping quiet about it, and the whole market is perturbed.

The spinners' strike, which was hindering the production of a great many mills in New England, is evidently over; although little definite information can be obtained, it seems that the mills have won.

Plan "More Sheep" Meeting

The Philadelphia Wool and Textile Association is arranging for a conference to be held in Philadelphia in the early part of November for the purpose of developing still further the general activities of its campaign for increasing the flocks of sheep along the eastern seaboard. It has been the textil manufacturers associations, leading manufacturers of wool goods, and the boards in various States as well as the chambers of commerce in different localities, and even the railroads. The Baltimore & Ohio and the New York Central railroads have expressed great interest in the work of the conference.

On this point the Philadelphia Wool and Textile Association is working in an effort to provide a satisfactory outlet for the wool to be grown in these eastern sections. A large attendance at this conference next month is assured.
Fence That Gives Satisfaction
In Every Particular

is the only kind to place around your factory buildings. To
insure protection from prowlers, from storm and from fire, sur-
round your property with

EXCELSIOR
BRAND
Chain Link Fence

This fence not only gives complete protection but lets in all the
daylight and enhances the appearance of the premises. This
fence is built to stand erect for years, made of strong steel posts
set in cement, strong steel wires heavily galvanized to prevent
rust.

Ask your hardware dealer about Excelsior Rust Proof Flower Bed
Guards, Trellis Arches and similar attractive garden goods. Write
us direct for attractive catalog M. upon fencing for all purposes.


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Practice Will Accomplish Wonders

IT’S practice in making belting as well as we know how that
has brought Schieren’s Duxbak Waterproof Leather Belting
to the high state of perfection it has reached.
The selection of hides, tanning, dressing, Duxbaking, cement-
ing and finishing is done by men who are experts in their lines
and whose value to us is weighed by the thoroughness of their
work.

Try one of these non-stretch belts and you’ll find it costs far
less in the end than ordinary kinds.

Duxbak won the highest award at the San Francisco Exposition—
A Gold Medal of Honor.

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JONES & LAUGHLIN
STEEL COMPANY

Manufacturers of Various
Steel Products

Branch Offices

Boston  Detroit  South Side Works
Buffalo  New York  Keystone Works
Chicago  Philadelphia  Eliza Furnaces & Coke Ovens
Cincinnati  San Francisco  Sobo Department
Cleveland  St. Louis  Aliquippa Department

Works

General Offices

JONES & LAUGHLIN BUILDING
PITTSBURGH

125
larly large stock of the kind of substitute that goes into any one color. When the season advances, it is found that one shade is outstripping another, it is necessary to buy such stock as will make up into that shade and it is usually the case that an advance over the original price has to be paid. This is only one of many arguments that the dealers advance to refute the charge that they are raising prices unjustly.

**Dress Goods Trade Notes**

Staples and semi-staples are increasing in popularity daily with fine twill gabardines and poplins predominating. It is reported that all makes of staple coatings are selling well, but that they are scarce and hard to be found.

Knitted suiting has not been selling well lately, but knitted coatings, of which there are a great many varieties on the market, are going fast. Nearly every women's wear maker is said to be putting in a knitting department as quickly as possible.

Now that the dress goods market is not so buoyant as it was, there is great discussion of the coming campaign, and all are looking forward confidently to a Republican victory.

**SILK RATES PROTESTED**

Present Schedule Based on Value, According to Carriers

WASHINGTON, Oct. 9.—The question of the correct classification of artificial or natural silk, raw, thrown or spun, and of silk waste including pierced cocoons, nylons, frisons and shoddy are all involved in the "Silk Association of America vs. the Pennsylvania Railroad Company, et al." now pending before the Interstate Commerce Commission in Docket No. 8617.

Prior to June 2, 1915, by items 19-24 of Official Classification No. 42, silk, raw, thrown or spun, whether or not on wooden spools, bobbins or warp beams, was rated at first class, less than carload, when the valuation did not exceed $1 per pound, and when it was not expressed, or if expressed was valued at more than $1 per pound, it took three times first class; silk waste was rated at first class, regardless of value.

The effect of the passage of the Cummins amendment, which became effective June 2, 1915, was the enactment of the following rating: "silk, raw, thrown or spun, whether or not on wooden spools, bobbins or warp beams, less than carload, when the value did not exceed $1 per pound, first class; when the value thereof exceeded $1 per pound a rating of 1 1/2 times first class is given."

The Silk Association attacked this latter rating on the following grounds: That raw, thrown or spun silk should be carried at first class rates, regardless of value. That raw, thrown or spun silk on wooden spools, bobbins or warped beams should be carried at second class, regardless of value; and that silk waste, nylons, shoddy, etc., should be carried at the second class. The carriers protest against the ratings asked for by the association. They call attention to the fact that it always has been, and is now the practice of the carriers through their tariffs to refuse to accept articles of extraordinary value, which are not adapted to transportation by freight. The reason that they give for classifying silks as they do is summed up in the one word “value,” that, they contend, is the predominating characteristic of raw silk upon which the justification of the present rating rests.

**STEAM LUSTERING FACE FINISH GOODS**

Kerscys, Beavers, Billiards, Plushes and some use it for worsteds.

We have more of these machines in use than double all other makes combined.

**FIFTEEN IN ONE MILL**

Parks & Woolson Machine Co.
Springfield Vermont

**Important Improvement in Worsted Spinning**

**The Bamford**

**DUST PROOF and SELF-LUBRICATING**

**Spindle Tube**

**Saves oil, prevents clogging with dust and lint, thereby insuring longer life to the tube, saves labor, maintains uniform speed, and most important of all, makes PERFECT YARN. Refer to largest worsted mills.**

Bamford & Smith
Providence, R. I.

ALSO MFRS. OF STEEL CAPS AND SPINDLES
Caps, Flyers, Tubes, etc., Repaired.

**WE MAKE JUST ONE THING**

**MILL CRAYONS**

We are the ORIGINAL manufacturers of Mill Crayons. Nearly half a century ago we started manufacturing crayons for textile mills and we have been at it ever since.

The "LOWELL," the acknowledged leader of mill crayons, is made by experienced mill men—who know the needs of textile mills. For all uses in COTTON, WOOLEN and WORSTED mills the "LOWELL" Crayon is unequalled. They are just soft enough to mark the finest materials without injury and yet hard enough to wear well. 15 colors and white. Contains no oil or grease. LEAVE NO STAINS AFTER BLEACHING. Write for color card and prices.

LOWELL CRAYON CO., Lowell, Mass.

**ANTIMOT**

A MOST EFFECTIVE
MOTH EXTERMINATOR
FULL PARTICULARS FROM
BERLIN ANILINE WORKS
213 Water St.
New York City

**I. FOUILDS & SON, Inc.**

HUDSON, MASS.

Textile Leather Manufacturers

Do Not Contract For Your
TEXTILE SODA
For 1917
Until You Get
Prices On
Blue Label
Prosperity Soda

"IT'S LOCKED IN"

This successful blending of live ammonia and re- fined soda is the greatest cleansing agent the textile trade has known.

PROMPT DELIVERIES
Stocks carried in over 100 Warehouses.

Isaac Winkler & Bro.
Manufacturers
CINCINNATI, OHIO
Works: Barberton, Ohio

A Tested New WOOL OIL
That Costs Less!

K. D. OIL

We are prepared to fill promptly all orders for K. D. Oil and will be pleased to ship a trial lot for testing and comparison with the oil you are now using.

K. D. Oil scrubs easier, carries stock better and is especially desirable where old stock containing much dirt and grease is used.

K. D. Oil will not gum the cards and mixes readily with cold water without separating.

We can help you to effect a considerable saving in your oil expense—write us today for a trial lot.

ULCO OIL CO.
Detroit, Michigan
HALE STREET and GRAND TRUNK RAILROAD

Oil Stains Produce a Needless Loss

That you recognize this is proved by the methods you adopt to prevent oil stains. But why not strike at the root of the trouble and eliminate them?

You can do so—with

NON-FIUID OIL

It is a remarkably adhesive lubricant. It sticks to the part it is lubricating—does not thin out and fly over parts, walls, etc. IT DOES NOT CAUSE OIL STAINS.

Non-Fluid Oil is more economical than fluid oils and more efficient than greases. It is a friction-killing, money-saving lubricant.

A grade for every purpose
Write for samples
New York & New Jersey Lubricant Co.
165 Broadway, New York
MILL NEWS

Cotton

*Killingly, Conn. Further development
in the plans of the Killingly Manufacturing
Co. have been made known re-
cently, when W. I. Boulard, assistant
treasurer of the company, announced that
the opinion which the company held on
the Barnum Mills, Fall River, has been
allowed to expire. This is said to be prac-
tically an assurance that the con-
cern will build its own yarn mill, pro-
bably undertaking the work before the
summer of 1917. Reports regarding the
completed enlarging of the company's
facilities have been in circulation for
some time, but the company has been
undecided as to whether to build its
own mill, enlarge present plant or
lease new buildings. A mill capable of
producing 80,000 pounds of yarn per
week will be required.

*Putnam, Conn. The State Trade
Shop, which is being erected in con-
junction with the State Textile School, is
to manufacture plain and fancy cloths
from 10s to 80s yarns with an equip-
ment of 216 ring spindles and 4 looms.
A dyehouse is to be added in the near
future, the product to be sold direct.

*Albany, Ga. Flint River Cotton
Mills have signed all contracts for their
recently announced new mill. The
amount of $430,000 will be the cost of the
new plant, and $26,000 will be the
cost of the building. The latter will be
120 x 200 feet, of brick construction.
It will be equipped with 11,000 spindles,
260 looms, rope power drive, etc., for
manufacturing cotton cloth.

*Athens, Ga. The Princeton Manu-
facturing Co. denies report recently
published concerning the purchase of
1,600 spindles, and states that the report
may have arisen from the fact that a
humidifier system is being installed.

*Macon, Ga. Bibb Manufacturing
Co. will increase capitalization from $1-
500,000 to $2,500,000. It is understood
that this additional investment will pro-
vide for additional mills and improve-
ments heretofore announced, together
with some future betterments that will
be given consideration.

*Dallas, Tex. Dallas Cotton Lint
Co. has been organized to establish mill
for manufacturing cotton felt, cotton
linters, etc. It will invest $20,000 for the
equipment of the machinery to include
cards, pickers, oil and power drive, etc.
Tom B. Burnett is president.

*Rochester, N. Y. The Rochester Manu-
facturing Co., manufacturer of sheetings,
shirts and yarns, has installed elec-
tric power in its plant, according to re-
port.

Lawrence, Mass. The Arlington Mills
have purchased two plots of land
on Stafford street from George A. H.
Cooper of Methuen, according to a rec-
ord filed at the registry of deeds. The
lots are 58 x 33 and 96 x 73 feet.

*Lowell, Mass. J. C. Wadleigh,
agent of the Merrimack Manufacturing
Co., plain and fancy cotton, bleached,
printed and finished corduroys, advises
that the 33 x 41 foot building which was
recently reported as being erected by
the company is being built in the
yard for temporary purposes only, and
that he cannot at this writing state how
much new machinery will be installed.

New Bedford, Mass. The Nashawena
Mills are making plans for the erec-
tion of an addition to their plant, which
will be two stories high, 100 x 200 feet.
The silk machinery will be moved into

* Indicates previous mention of project.

Part of Naunong Steam Cotton Company's Picker Room, showing 14 horsepower Westinghouse Type CS Picker Motors and Starters, with overload and low voltage release. A frame drive on two bucket pickers.

Westinghouse Steel Type Impregnated Picker Motors

Westinghouse Electric & Mfg. Co.
East Pittsburgh, Pa.

Atlanta, Ga.
Boston, Mass.
Charlotte, N. C.

New York, N. Y.
Syracuse, N. Y.
SOFT WATER

REFINE is changing ideas regarding the employment of soft water for all textile processing. Whereas mills were formerly content to get along with water that was nearly soft or at the best put in apparatus that would partially soften water, they are now installing systems that will reduce water to absolute softness.

The mechanical advantages of such water for textile processing are obvious. The chief reason for the change in ideas at this time has been the introduction of Refine.

This natural mineral has reduced the cost of absolutely soft water to within reach of every mill. More than this, the Refine process is so simple and powerful that new efficiency standards have been set in the softening of water.

Learn about Refine today. A postal will bring complete information.

Des Moines Refining Co.
109-111 East Walnut Street
Des Moines, Iowa

A. W. Buhlmann, Eastern Representative
200 Fifth Avenue, New York

MILL NEWS—Continued

Knit

"Hickory, N. C. The Ranford Knitting Mills, recently noted as having incorporated with a capital stock of $100,000 ($15,000 paid in), is just starting up machinery on the manufacture of ladies' 176 needle and children's ribbed wool hosiery in the new mill. The officers of the company are G. E. Han- son, Weldon, N. C., president; E. L. Shuford, Hickory, N. C., treasurer, and C. N. Groves is the superintendent. The machinery will be operated by steam power, and there is to be a dyehouse, although this has not as yet been completed. The product will be sold direct.

"Conway, S. C. Charles R. Scarbor- ough, who was mentioned recently as interested in plans for establishing a mill, will probably soon complete arrangements for organizing a company to manufacture knit goods.

Guelph, Ont., Canada. J. A. Paul, Wyndham street, has opened up the Guelph Hosiery Co. on men's worsted goods.

St. Catharines, Que., Canada. Johnson & Shardlow, Lennoxville, have opened up a mail department at their local branch with L. M. Moore, formerly with the Holeproof Hosiery Co., London, Ont., in charge. Considerable equipment is being added to the main plant to take care of the heavy orders that have been booked.

"Tower City, Pa. The increase in capital stock from $50,000 to $150,000, which was recently purchased by the Knitex Underwear Co., is to provide for an addition to the company's plant and equipment. When the addition, which is now being built, is completed there will be a total floor space of 20,000 square feet in the plant. Ten additional knitting machines will be installed, bringing the total up to 30 latch needle machines.

"New Haven, Conn. The Mentor Knitting Mills, which have been closed for several months following the death of the manager, J. B. Henrie, have been sold to a syndicate of local capitalists, according to report. It is stated that plans are under way to open the plant within a short time, but whether it will continue to be operated as a knitting mill is not known at this writing. The Mentor Knitting Mills manufacture men's, women's and children's ribbed underwear and union suits, cotton, worsted, silk and mohair.

New Haven, Conn. The Winona Mills Hosiery Corp. has been incorporated for $50,000, divided into 1,500 shares par value, $100, all common stock. The company will begin business on $150,000, and the incorporators are Mrs. C. A. Smoak, Mabel S. Bartlett of New Haven, and Andrew Douglas of New York. This is believed to be the re-incorporation of the Winona Underwear Co., which has operated a mill at 30 Wallace street for a number of years, the capital stock being $100,000.

"Boulder, Colo. Fire completely destroyed the plant of the Hamer Narrow Fabric Co., causing damage estimated at $50,000. The company operated 30 looms on the manufacture of scolloped edgings for underwear and dresses.

*Indicates previous mention of project.

Silk

"Paterson, N. J. Buyer Bros. & Sons have chartered a 16 loom broad silk plant in Champin Bros.' new mill, 191 S. First street, Lakeview, and hope later to move these plans to a larger building.

"Paterson, N. J. Almliehenstein has recently placed 20 broad silk looms in the Albion Mill, Madison street, and is running under his own name. There is still space in the mill for the installation of 20 additional looms.

"Paterson, N. J. A new broad silk concern just started in the Bell Mill with 10 looms is known as the Quality Silk Co. The owners insist that no前途 could not be obtained at this writing. It is said that the company expects to increase the mill about May 1917.

"Paterson, N. J. The Ward Silk Co. is the name of a firm lately established in the Bell Mill, Fifth avenue, with 20 broad silk looms. George Abras is the proprietor.

"Mount Morris, N. Y. Local men are said to be strongly endeavoring to secure the location of a silk mill in Mount Morris. F. J. Mann is named as one of the chief interested in the project, and it is stated that he has been negotiating with local capital to take stock in a new company, which will draw from 500 to 1,000 hands, the mill to be established within the next few months.

"New Bedford, Mass. The Osmol Mill, which was recently purchased by the Klotz Throwing Co., is being thoroughly renovated and newly equipped with silk throwing machinery; and will probably be in operation about December 1. A small portion of the equipment is already on the premises; it is stated, but difficulty in securing prompt deliveries has held up work at the plant.

"Paterson, N. J. The Japon Silk Co., which was recently purchased several months ago with a capital stock of $25,000, is operating 18 looms on the second floor of the Albion Mill, Madison street, and it is reported that this number of looms will be increased to 40 within the near future.

"Paterson, N. J. Wagman & Hayman, Inc., who have recently started in the Bell Mill with 16 broad silk looms, are looking for floor space, and expect to add 20 looms to their present equipment, it is reported.

"Johnstown, Pa. The Bucer Silk Co., Inc., advises that contrary to report circulated recently, no addition is contemplated for the present.

"Hazelton, Pa. Reports which have been current for several months regarding the addition to the plant of the Hazelton Silk Mill, operated by Louis Roesel Co., have culminated in the report that the Hogg Construction Co., of Philadelphia, has been given contract for the construction of a four-story, 60 x 200 foot building to be erected on McKinley street. This building, it is stated, is to be of fireproof construction, and will contain all modern improvements, such as lockers, lunch rooms, retiring rooms for employees, etc. The completion of the mill will increase the capacity of the mill to about 300 looms. Specifications state that building is to be ready for occupancy about May 1, 1917. The Hazelton Silk Mill manufactures broad dress silks with an equipment of 92 wide and 10 narrow looms. It was reported to these columns that March, that the Washington, N. J., branch of the Louis Roesel Co. was to be moved to Hazelton and incorporated into the new building, but this was merely a local rumor and has not yet been confirmed by the company.
MILL NEWS—Continued

Wool

LAUREL GLEN, CONN. A company to be known as the Laurel Glen Worsted Co. is to be organized by Charles P. Eocene, Ralph M. Briggs and John S. Bordick, according to local reports. It is stated that the company has taken over the property of the old "Solomon Barber" mill, and has already commenced construction work on a cement penstock to carry the water supply. Work on the erection of a new mill building is soon to be undertaken, it is stated.

PHILADELPHIA, PA. Och & Williams have started up the Wooltex Manufacturing Co.'s 18 loops, which they are operating on commission weaving of men's wear cotton and worsteds. The plant is located in the Lomax Mills, Jasper and Mass. Avondale mills.

CLINTON, MASS. The Burton Co., advises that the capacity of the plant is to be tripled as soon as machinery can be procured and set up. Several sets of cards have already been installed and when all the new machinery now on order has been set up the force of operatives will be increased to approximately 160 hands.

CONCORD JUNCTION, MASS. The Strathmore Worsted Mills have leased a building of the Commonwealth avenue, and after making necessary repairs will utilize it as part of the Strathmore plant.

PATERSON, N. J. No new machinery is to be added to the Peerless Plum Mill Co.'s plant, although the company advises that the details were published last week regarding the erection of a new dyehouse and warehouse are correct.

WILTON, ME. The Wilton Woolen Co. is building an elevator in the center of its upper mill.

WINCHESTER, VA. The Virginia Woolen Co. is building an addition which will double the capacity of the present plant. The new building will provide space for 120 looms and is expected to put approximately 200 operatives will be added to the present force. The company will install 50 new looms and 18 sets of woolen cards, with the present equipment of 72 looms and 8 sets of cards, will be operated on flannels, cassimeres, velvets and cheviots.

NEWTON, Ala. The Killebrew Manufacturing Co., which was noted last week as having incorporated, is the successor to the Killebrew Woolen Mill Co., manufacturer of cotton and woolen jeans and pants. The old company was incorporated for $40,000, while the new concern has a capital stock of only $30,000. No other changes have been made.

Miscellaneous

NORTH BROOKFIELD, MASS. The Phoenix Linen Co. advises that the addition of machinery recently reported consists of 2,816 cotton ring spindles, which have been purchased from the Atlas Yarn Co., the Southbridge, Mass., concerns which recently closed its mill and offered its equipment for sale. These machines will be used to spin warps for use in the manufacture of flatweave and crash.

SPRINGFIELD, MASS. Plans are said to have been drawn for the mill to be erected on Plainfield street for the Bozart Rug Co., 256 Birnie avenue. Specifications call for a fireproof structure, 60 x 300 feet, two stories and basement, of brick and stone construction, with concrete floors and fireproof roof, etc. It is stated that a power plant will also be erected. Newton C. Bond Co. is the architect.

PATERSON, N. J. The Victory Silk Dyeing & Finishing Co. announces that the new mill which is being erected at 48-58 Bleeker street, will be one story high, of brick construction throughout, and will consist of a dyehouse, executive offices and finishing department. This mill will cost $12,000, and it is stated that new machinery will be installed in every department.

PHILADELPHIA, PA. The addition to the plant of L. B. Luithlen Co. is to be used for storage and drying purposes, and no new machinery is to be added to the present equipment. As previously noted this addition will consist of two stories and basement.

READING, Pa. The Reading Dyeing Co. is said to have erected an addition to its plant which cost approximately $1,000. The new building is two stories high, 40 x 116 feet.

SAYVILLE, N. Y. An addition is to be built to the plant of the Sayles' Bleachers, according to report. The addition will be of brick construction, 79 x 70 feet, and will be used for finishing cloth.

PHILADELPHIA, PA. The Philadelphia Dyeing & Finishing Co. is equipping the one and two story buildings formerly occupied by Sykes & Geiger, Frankford and Dyke streets, Frankford, with machinery for the dyeing and finishing of cotton fabrics. The concern has been incorporated with a capital of $100,000. The offices are at 50 W. 4th St., formerly connected with the Sommerville Dyeing, Printing & Finishing Works, Inc., president and superintendent; Franz Merz, vice-president, and A. W. Hardwick, secretary and treasurer, acting as lawyer. The capacity of the plant will be 25,000 yards per day, and the company will engage in the dyeing and finishing of all kinds of cotton goods.

PATERSON, N. J. Plans for the new factory building of the Paterson Industrial Development Co., were given last Monday by the Chamber of Commerce, and bids for contracting may be submitted up to November 15. This plant is to represent an investment of approximately $250,000, is understood, and when completed will be leased to small concerns desiring to locate in Paterson.

PHOENIX, N. Y. The plant of the Duffy Silk Co., which was destroyed by fire on Sept. 23, will be rebuilt immediately, the intention being to erect a large modern mill. The fire was a disastrous one, destroying practically all of the business section of Phoenix and the loss sustained by the Duffy Silk Co. alone is estimated at $150,000.

SAYVILLE, N. Y. Last June it was reported in these columns that a Paterson silk concern, the name of which could not be ascertained, was to build a new mill in Sayville. Recent reports state that a new silk concern is to be located here, and that building has been leased and new machinery installed.

PHILADELPHIA, PA. Application for a charter of incorporation for the Chestnut Hill Towel Mills, Mascher and York streets, will be made by Patrick McPeak, Mary C. McPeak and Edward P. McPeak. This plant has been in operation at the address above for some time.

WILLIAMSTOWN, CONN. The Rosie Velvet Co., with main plant at Mystic, is said to be rapidly expanding its present quarters in the Williamstamic Industrial Co.'s mill on South Park street, and it is expected that a large addition to the building will soon be necessary.

BUILDERS OF AMERICAN TEXTILE MILL MACHINERY

"I have known and seen the value of S. K. F. Ball Bearings" says Mr. Lowe

In this day of rising production costs and keen sales competition, haphazard selling methods cannot endure. When Mr. Lowe, with his thirty-three-year record, says that he has seen and knows the value of Ball bearings, it is pretty safe assumption that he is giving the user what he wants. He realizes that the presence of S. K. F. Ball Bearings reduces upkeep cost and makes Textile Machinery better and faster producers to its owners. We appreciate the remarks of this well-known Cotton Mill expert.

Mr. Lowe says:

S. K. F. Ball Bearing Co.,
Hartford, Conn.

Dear Sirs:

I have been in the mill supply and machinery business for the last thirty years and have known and seen the value of ball bearings, and I positively believe in the S. K. F. Ball Bearings from what investigations I have made. As a saving device, applied to machinery, it has my entire approval.

Yours very truly,

STEPHEN C. LOWE.
NO MORE ROCKER SHAFT TROUBLES
More than 500 Mills have installed this trouble eliminating device

The Day
Adjustable
Rocker Shaft
Bearings

No. 1A — Adjustable Rocker Shaft Bearing
Patented Oct. 26, 1915

A practical, common sense attachment that has not yet failed to satisfy a single mill. After testing these bearings, many mills have ordered a complete equipment because of the self-evident advantages in using them.

They will outlast the loom, save cost of new Rocker Shafts, reduce seconds and thin places, save in supplies, breakouts, etc. A mere turn of a screw makes them like new.

Either style delivered for $1.00 per pair. Specify kind of loom you use, how many to send, and mail your order to our Sales Department

TEXTILE SPECIALTY COMPANY
Formerly DAY ADJUSTABLE BEARING CO.

Singeing, Bleaching, Mercerizing, Dyeing, Drying, Printing and Finishing Machinery
for
Textile Fabrics and Warps

The Franklin Process Co.
291 Promenade St.
Providence, R. I.

The Textile-Finishing Machinery Company
PROVIDENCE, R. I.

N. Y. Office — 30 Church St.
COTTON MANUFACTURES

SUBMARINE ACTIVITIES AFFECT SHIPPING RATES

Sharp Advances Recorded, While Cotton Goods Exports Avail Further and More Definite Development

Activity of German submarines off the Rhode Island coast early in the week, when a number of ships from Allied and neutral nations were sent to the bottom, played havoc with marine insurance rates. An advance in insurance which was not definitely determined upon early in the week adds another disturbing element to the situation confronting exporters of American cotton goods. In conservative quarters, it was stated, that a rate of 6 per cent, was quoted generally for Northern European ports, with Mediterranean rates fully as high. For vessels and cargoes bound for the Far East via the Suez Canal rates quoted were about 8 to 10 per cent, and for South America and the West Indies, the rate was approximately 3 to 5 per cent. Opinions of prominent factors on the market as to the effects of this new development on cotton goods exports had not reached a maturity sufficient to enable a free discussion of them, and the general attitude of the trade seemed to be one of waiting developments. This attitude was also prevalent in shipping circles and sailings of a number of boats for European ports were postponed. Pending further indication of the extent to which shipping is to be affected by the new menace of the Atlantic Coast, trading is reported as somewhat restricted in merchandise for export, sellers holding up transactions until the possibilities of the future become more apparent. Prices on domestic goods showed no declines, but business was lighter, and the general policy of buyers more cautious.

CONDITIONS GENERALLY UNCHANGED

While merchants report a continuance of the large and steady business with South America and the miscellaneous markets, the large outlet for American goods remain out of the market so far as purchasing is concerned. India, China and the Red Sea show no signs of life, and each advance in price makes it more improbable that activity may be expected from them in the near future. Exporters state that it is absolutely impossible to interest buyers at current quotations, even when they point out the continued appreciation on all lines of goods. Maintenance of good business with the Philippines is reported by sellers active in this market. A hint of possible improvement in the China situation, which market is regarded as lost to this country until the (Continued on page 56)

Comparative Quotations

British Indigo...

India............ 70c. 5/4, 75c. 10/4, 80c. 10 1/4, 85c. 12 1/4, 0 1 1/4.

Colombia........ 35c. 10/4, 50c. 10 1/4, 65c. 15/4, 1 5/4.

Cuba............. 50c. 4/4, 70c. 7 1/4, 85c. 12 1/4, 90c. 15 1/4.

Costa Rica..... 12 1/4.

Dominican Rep. 45c. 4/4, 60c. 5 1/4, 75c. 8 1/4.

French Indo-China 90c. 15/4, 1 1/4.

Guatemala..... 65c. 7 1/4, 1 1/4.

Haiti........... 35c. 1 1/4, 50c. 1 1/4.

Japan........... 20c. 1 1/4, 25c. 1 1/4.

Hong Kong..... 45c. 7 1/4, 55c. 1 1/4.

Honduras..... 65c. 6 1/4, 1 1/4.

Jamaica........ 95c. 4 1/4, 1 1/4.

Nicaragua.... 35c. 4 1/4, 50c. 1 1/4.

Peru........... 45c. 4 1/4, 65c. 8 1/4.

Portugal........ 25c. 5 1/4, 35c. 8 1/4.

Puerto Rico... 90c. 7 1/4, 1 1/4.

Samoa........ 50c. 4 1/4, 65c. 1 1/4.

Savoyard.... 60c. 7 1/4.

San Domingo.... 90c. 1 1/4.

Straits Set. 75c. 7 1/4.

Sweden........ 40c. 1 1/4.

Uganda........ 45c. 4 1/4.

Uruguay........ 55c. 1 1/4.

Venezuela..... 50c. 4 1/4.

DEMAND-SUPPLY RATIO RULES ENGLISH COTTONS

Trade is Bullish on Future Without Consideration of Raw Cotton Production Limited and Decreasing

By Frederick W. Tattersall

March 1, 1916. Apart from the amount of business passing or change in raw material rates, there is a tendency toward a stronger tone in the market. The situation is abnormal, and it is not possible to gauge the outlook in the same way as in the past. It is stated that the military authorities are determined to take still more men from spinning mills and weaving sheds and consequently the decrease in production must continue. This factor is playing an important part in the local industry. It is scarcely possible to record a large business, but demand is steady and persistent, and sufficient orders have been booked to maintain the position of producers. A remarkable development in connection with Egyptian cotton prices has caused much comment and it is fortunate that spinners in Bolton and district are in a strong enough position to put up their quotations and refuse to sell except at top rates.

MANUFACTURERS MORE INDEPENDENT

A distinctly more independent attitude is now being presented to buyers by manufacturers of cloth than at any period since the beginning of the war. Engagements of course are tendered, but certain styles of goods are sold well next year at profitable rates. (Continued on page 62)

COTTON GOODS QUIET, BUT PRICES ARE FIRM

Submarine Scares Affects Business in Gray Goods Temporarily—General Strength Unabated

Uncertainty created by German submarine activity, led to a drop in raw cotton on Monday, a caused a distinct falling off in gray goods business on the cotton goods market. Buyers were out of the market almost entirely on Monday, but an improved tone was displayed on Tuesday. The price strength of all lines of merchandise was fully demonstrated by this temporary unsettling element, all quotations being firm. It is also noticeable that in asking prices on certain gray goods were reported. Cotton fulfilled the expectations of practically all well-informed merchants by promptly regaining almost all its lost ground on Tuesday, the opening of futures being approximately even with the closing on Friday of last week. All market factors unite in the belief that the unprecedentedly strong position of all lines of merchandise cannot be disturbed by incidents similar to the sinking of six ships, aside from a mere temporary sentimental effect. Fundamental conditions are so sound that nothing but the most startling unexpected developments will alter the situation for six months or more, it is felt. Higher prices for raw cotton and piece goods are almost accepted as a matter of course.

GRAY GOODS FIRM

Heavy business in gray goods was

Table of Exports of Cotton Manufactures from Port of New York for Week Ending October 10, 1916

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<td>Total</td>
<td>$111,789</td>
<td>$1,675,661</td>
<td>$225,422</td>
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* These figures are a compilation of the daily reports issued by the Bureau of Statistics, Custom House, New York. Apparent discrepancies may be accounted for by delay in receiving declarations of shipments until after sailing of ships. Such discrepancy, if any, are equalized the following week.
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