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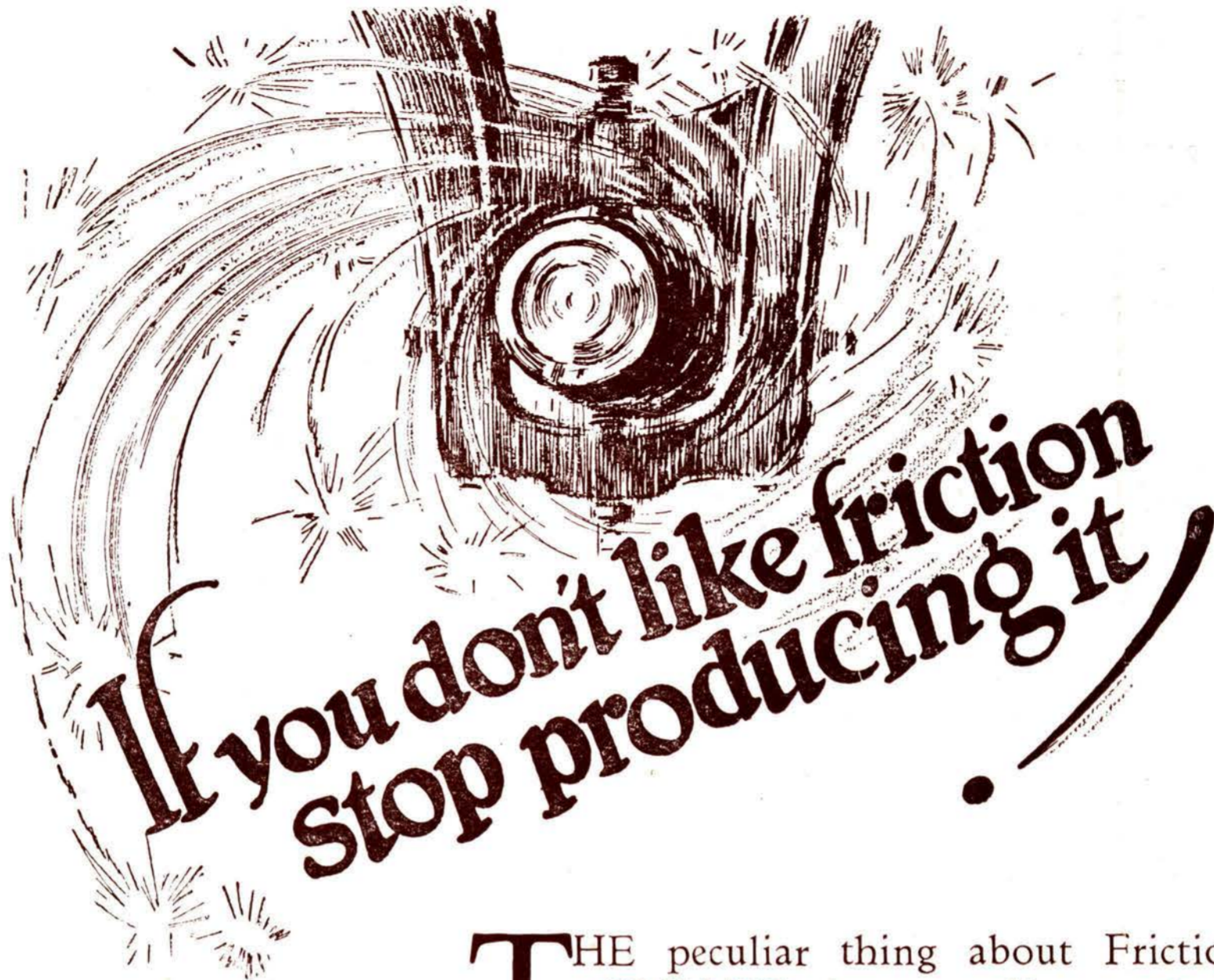
The
Textile Journal
of
Australia

A Financial, Commercial, and Industrial Review
of the Textile Industries of Australia.
Circulating throughout the Commonwealth of
Australia and Overseas throughout the World.

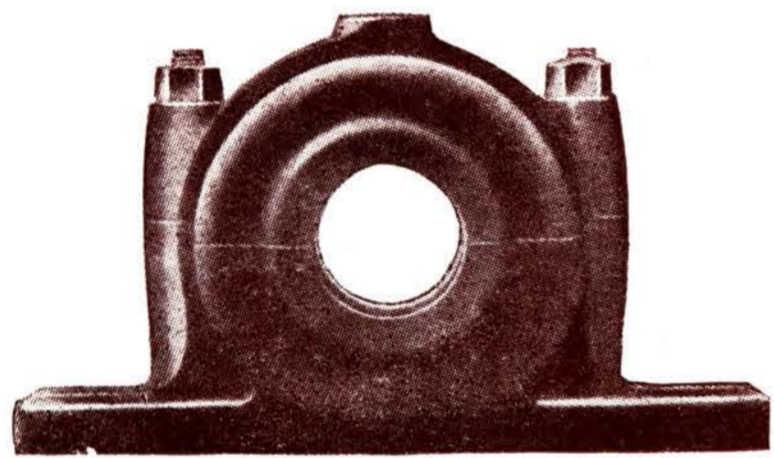
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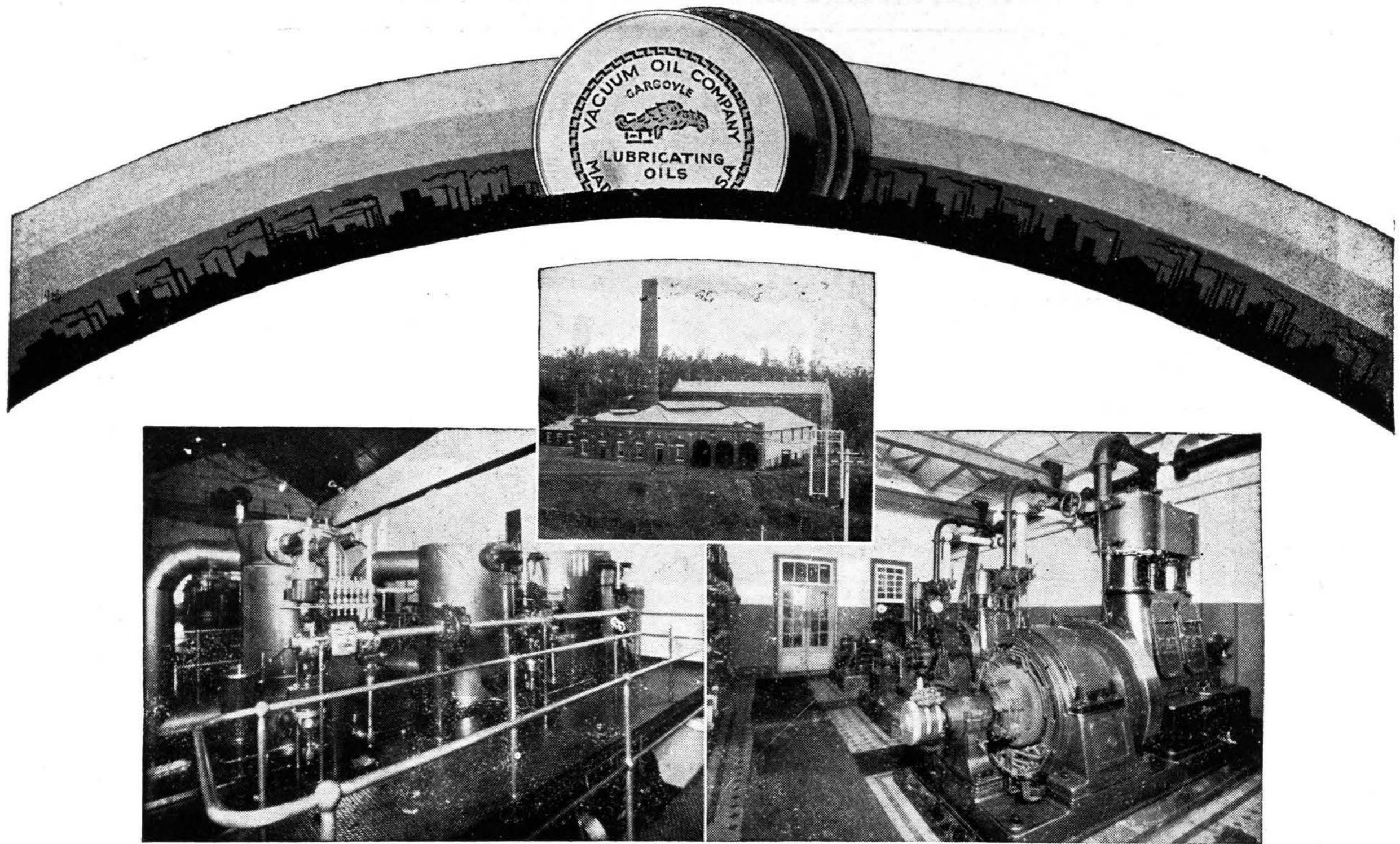
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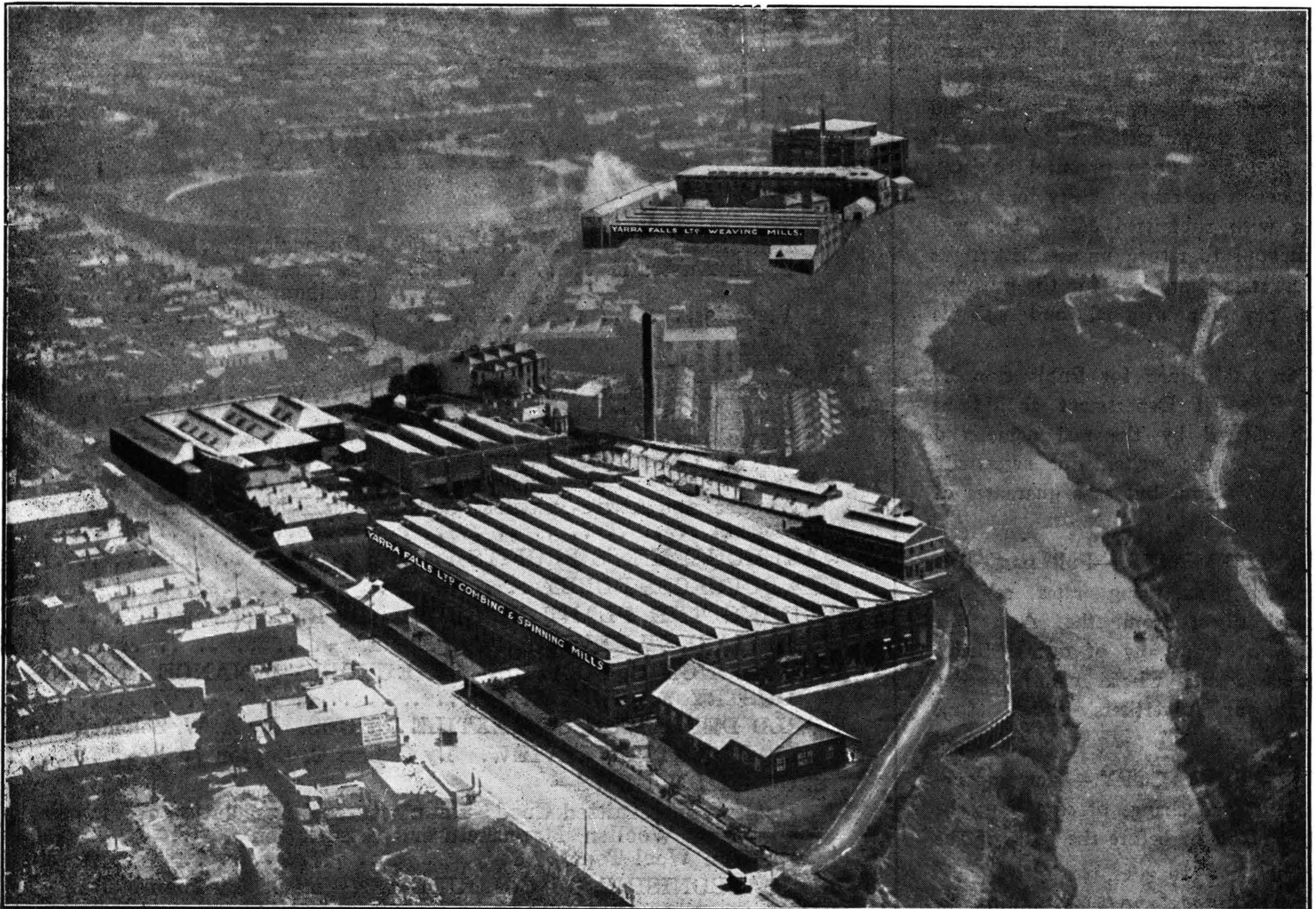
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NEW SOUTH WALES

(From Our Own Correspondent.)

Wool Prospects.

With two out of the four sales catalogues of the post-Easter ninth series disposed of, the wool position has not yet reached that niche of clarity rightly expected of it. The market is undoubtedly lacking in stability, and there is a manifest tendency on the part of certain interests to conceal the real position—at any rate, to minimise considerably its seriousness to growers. It is extremely difficult to fathom the motive underlying this policy, unless it is to hearten up prospective woolgrowers. There is one section that will not be deceived. I refer to those growers who have received their statements of sales and cheques for the current sales. The market, despite the high quality and general attractiveness of the post-Easter catalogues, is still 15 per cent. under the average figures for the November-December series. The fact that clearances approximate around the 97 per cent. mark offers little consolation to growers facing greatly depreciated prices. There is something “rotten in the state of Denmark” when very attractive catalogues of wool, drawn from the celebrated Yass, New England, Upper Hunter and Barraba districts, meet with so little competition. These clips generally show good length, nice quality and style, being dry and carrying very little vegetable fault.

Wool, at the present season's ruling rates, is cheap enough to hold for a rise. Under existing trade conditions overseas there is an inevitable oversupply. Oversupply spells lack of competition. Lack of competition means only one thing—low prices for the growers.

The March 25 figure (28½d.) was topped at the sale on May 6, when 29¼d. was realised for five bales of super combings carrying the ASN/Mirani—New England (Walcha) brand. The wool was of superfine quality, stylish, bright, soft handling, good staple, and in attractive condition. There was an unaccountable drop of 7d. per lb. for an equally attractive lot of ten bales of super combings from the same owner. Admittedly, the lowest point of the market prices for the finer wools did not feel the decline in rates to the same extent as the less attractive offerings. The law of supply and demand exercises an important influence in such matters.

A comparison of the mid-March average clean cost of merino wool sold here with the present average may not be out of place:—

	Mid March.	Present.
	Pence.	Pence.
70's spinners' shafty fleece, free	28	30
64's/70's super fleece	24	26
64's/70's topmakers' fleece	21	23
64's average topmakers' fleece	19	21

60's/64's average topmakers' fleeces	19	21
Pieces, good	18	21
Bellies, good	17	19
Bellies, burry	16	18

In the general depreciation of wool values there is one important phase of the industry that appears to have become submerged in the greater issue of fleece values. Mr. F. W. Hughes, when giving evidence recently before the Tariff Board, brought this important matter under notice. Inter alia, he declared, “Australia had lost several big customers of wool tops, and could only counterbalance this loss by domestic reorganisation.” Proceeding, he pointed out that “while Australia is careful to safeguard her manufacture of woollen textile materials, it is amazing that no means are taken to protect the wool industry. In 1928-29 imports of wool tops and other wool was the equivalent of 13,776,534 lb. of greasy wool. While Australia exported 872,774 lb. of tops, 1,102,932 were imported.” It would be interesting to have the inside story of this adverse balance of trade. At first sight it carries with it a suggestion of some deficiency in the trade enterprise methods of the Australian tops manufacturers. On the other hand, it may be capable of quite a logical explanation.

That woolgrowers are at their wits' ends in an endeavour to preserve the wool industry from annihilation is quite evident from the time devoted to the problem at the recent Graziers' Conference. Following a four hours' heated discussion it was ultimately decided, by an overwhelming majority—“That this conference approves the principle of an Empire wool control, and if it is subsequently approved by the Graziers' Federal Council and the Australian Woolgrowers' Council, believes that Sir John Higgins should be invited to formulate a scheme thereon.” It was reported to the conference that Sir John Higgins was of the opinion that the only way of getting the industry out of its troubles was by some form of control or pool, such as an Empire pool would provide. The pool should be formed in Australia and South Africa, and then New Zealand should come in. Probably £50,000,000 capital would be required, and there was no doubt that this amount of capital would be forthcoming. The idea was to sell the whole of the wool by auction. It was proposed that the moment wool came under control it should be appraised, and within 14 days the pool would provide for the payment to each supplier of at least 80 per cent. of the value of his wool. Unanimity existed on one vital point—that some scheme of stabilisation was imperative in the interests of the Commonwealth woolgrowers, otherwise there will ensue a big swing-over to mutton and cattle, at the expense of wool. No person associated with the wool industry is optimistic enough to expect a return to the high prices of latter years, but

surely they are entitled to know where they stand as regards a fair deal in the future.

While the adverse conditions associated with the textile trade overseas, in respect of tops, yarns and fabrics, continue little scope exists for an acceptable solution of the problem. Two alternatives obtrude. Either cut down production costs of wool or increase its price. Both of these involve methods, not only slow in the process, but cumbersome and doubtful in the attainment. "The position will right itself; price levels are merely those justified by the law of supply and demand" are stock phrases, continuously prattled by the wait-and-see economists, who, unfortunately, contribute little to a constructive policy of a much-desired adjustment. The wool industry is admittedly in a position of grave jeopardy, owing to the continuance of low prices. Desperate situations demand desperate remedies. Many woolgrowers are faced with bankruptcy; prompt and effectual action is imperative. The wool control scheme suggested at least provides a possible solution. Opponents of the proposal contend that a free auction market produces better figures, by encouraging the good will of customers for the staple, than any effort interfering with the natural course of commerce, which tends to antagonise consumers.

It is not proposed to eliminate open auctioning of the clips, but if a "free auction market" means a glutted market, then, obviously, some system, aiming at an equitable rationing of supplies, without any diminution of standard, should be instituted. No reputable buyer would take exception to this stabilising scheme, so long as reasonable and regular supplies were maintained in order to meet the market requirements. Neither the woolgrower nor the woolbroker is particularly keen on building up a big carry-over of the season's wool clips.

Next month (June) the Graziers' Federal Council of Australia will meet in Brisbane, when the important wool-levy question will be reviewed. The Wool Publicity Committee has recommended that an annual levy of 2/6 per 100 lb. on the proceeds of wool sold in the Commonwealth be made for the purposes of wool research, wool publicity and the securing of new markets. The levy promises to be unpopular, in view of the doubtful benefits likely to attend the proposal, and of the overlapping in wool research work involved.

Apropos of the Leeds suggestion for the adoption of two shearings a year as a general practice in woolgrowing countries, a recent happening in the Bathurst district possesses interesting features. An itinerant crossbred wether, owned by Mr. W. T. Bullock, of Stoney Creek, after an absence of three years, strayed back to the fold, carrying an accumulated fleece growth. He was promptly shorn; the fleece turned the scales at the 34 lb. mark, and proved remarkably clean and sound.

Fur farming in the State appears to be an assured industry. The Maunganui, on her arrival in Sydney from Auckland, unloaded a consignment of 124 Chinchilla and Angora stud rabbits.

Trade Outlook.

Despite the general depression and the adverse coal export trade of the State—the outcome of the record industrial upheaval on the Northern coalfields—business in

textile circles is unusually buoyant. To what extent the Scullin tariff measure has been a contributory factor is difficult to estimate, although the fact that the increased activities synchronise with the advent of the tariff is well worth noting. Benefits will be more marked when the improved retail market is in a position—through an improvement in the purchasing power of the public—to absorb manufactures. It is somewhat refreshing to find that the textile manufacturers, fully alive to the wisdom of calming the fears of the great army of the buying public, have taken the earliest opportunity of making a public announcement on the matter of supply. Following the closing down of the business at the recent annual conference of textile manufacturers, held in Sydney, an assurance was given through the press that Australia possesses up-to-date wool manufacturing mills, efficiently equipped in all departments—carbonising, combing, spinning, weaving and knitting—to provide for all the requirements of Australia for many years to come, without any importation of woollen goods. On the question of prices the following pledge has been extensively proclaimed through the advertising columns of the leading "dailies":—"We, Australian manufacturers, pledge ourselves to play our part in all efforts to free the nation in its present crisis. We undertake to pass on to the fullest extent possible the benefits resulting from recent tariff changes." That is plain English, and constitutes a complete refutation of the profiteering innuendoes so rampant in the initial days of the Scullin tariff.

Personalia.

Mr. E. H. Williams (Castlemaine Woollen Company Ltd.) was elected president of the Associated Woollen and Worsted Textile Manufacturers of Australia at the recent Sydney conference. Mr. James Vicars, a son of Mr. Robert Vicars (John Vicars and Co. Ltd., Marrickville), was elected vice-president. Mr. F. L. W. Ashby (secretary Victorian Chamber of Manufactures) was re-elected secretary and treasurer.

With characteristic caution **Mr. J. W. Crane** saw to it that Mr. J. Stuart Thom, solicitor to the N.S.W. Textile Association, accompanied the motor excursion party to the Kurrajong Heights on May 1, arranged in honour of the Federal delegates.

Mr. C. G. Hannam, manager of the Worsted Manufacturing Co. (Aust.) Ltd., made his initial bow as the newly-fledged representative of his company at the Manufacturers' Conference.

The recently appointed manager of the Coerwull Woollen Mills (Lithgow), **Mr. Robert N. Radcliffe**, is well satisfied with the prospects of his old-established works. Notwithstanding the general depression he is finding business brisk.

Woolbuyers are commencing their annual exodus. **Mr. Harry Raper**, the well-known Macquarie place woolbuyer, was a passenger for oversea ports on board the Ormonde.

Cabled advice was received in Sydney of the safe arrival of **Mr. William Longworth** and family in London on May 2, following a pleasant voyage.

Mr. Horace Parkin, the recently appointed works manager of the Australian Woollen Mills Ltd., lost no time, after the arrival of the Mooltan, in getting into

harness. Mr. Parkin hails from Stanningley, a suburb of Leeds, long noted for its supremacy in woollen goods.

There are few business men in Australia who are privileged to possess an interest in all phases of wool—from the sheep's back to the warehouse. Mr. F. W. Hughes, principal in the firm of F. W. Hughes Pty. Ltd., is a woolgrower of note, owning some fine properties, enjoys a front-rank position as a manufacturer of tops, etc., and is now surprising the trade as a worsted manufacturer. Several pieces of excellent manufacture have been placed on the market.

Mr. Mark Foy, accompanied by his wife and two daughters, is at present enjoying the scenic beauties of the Near East. He left recently by the Nieuw Holland.

A recent tripper to the Land of the Moe, Mr. H. van de Velde, managing director of Felt and Textiles of Australia Ltd., returned by the Makura, after spending an enjoyable holiday.

Lord Stonehaven, in his farewell speech as patron of the Royal Agricultural Society, at the Royal Show, expressed his dislike of slogans. He commended one: "Hats off to the past; coats off to the future," as possessing peculiar appropriateness at this juncture.

Mr. T. Kitamura, managing director of F. Kanematsu (Aust.) Ltd., a leading Japanese woolbuying firm, left by the Tango Maru on a round trip to his native Nippon.

Mr. L. Grinlinton (Holdship-Grinlinton) returned to Sydney by the Esperance Bay. He discovered that German cloth could be procured in London at 4/ a yard, whereas the Yorkshire-made article cost 4/10. The German worker rolled his sleeves up and toiled for 56 hours

a week at a weekly remuneration of 35/; the Bradford man demanded £3 a week and found 44 hours a week more congenial.

Dr. A. C. D. Rivett, chief executive officer of the Council for Scientific and Industrial Research, is at present in England on behalf of the Commonwealth Government. He is investigating problems relating to the application of science to primary production and marketing methods.

Mr. F. H. Tout, the popular solicitor-pastoralist, of Young, has been re-elected president of the Graziers' Association of New South Wales. He enters on his third year of office. Sir Graham Waddell, a retiring vice-president, declined nomination for a further year. During the past five years he has either functioned as president or vice-president. Altogether he has given 13 years of faithful service to the Association.

Mr. V. J. van Dusen, a director of the Australia-British Columbia Shipping Co., arrived in Sydney by the Aorangi. He declared that Canada used Australian wool almost exclusively, which she purchased from Boston.

Mr. H. H. York, chairman of directors of Lustre Hosiery Ltd., admitted that his company was not leaning on the tariff wall, although the new tariff, naturally, had assisted materially in the expansion of business.

A son of the Rhodesian Prime Minister, and a great-grandson of the celebrated Scottish missionary, Robert Moffat, in the person of Mr. R. L. Moffatt, of Southern Rhodesia, was one of the visitors at the Easter Show. He is a keen sheep and cattle man. Dr. Livingstone married a daughter of Robert Moffatt.

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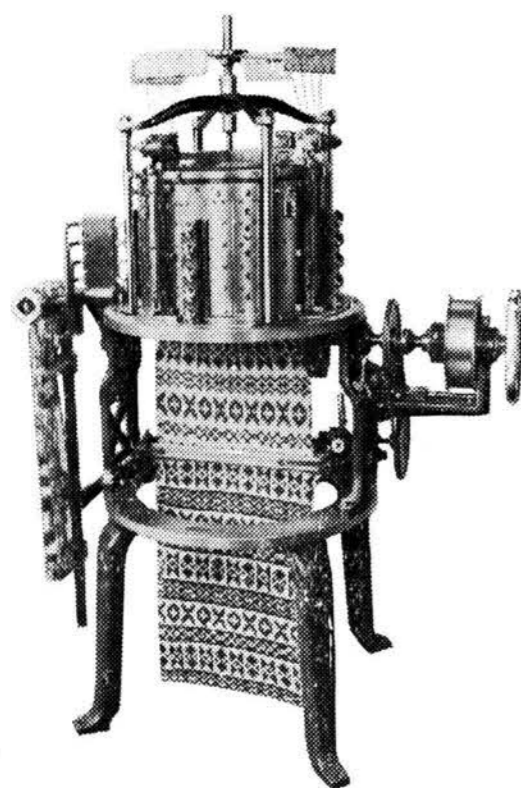
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QUEENSLAND

From Our Own Correspondent.

Wear More Wool.

"The Land of the Golden Fleece!" This expressive term used for so many years to describe the source of Australia's wealth, actual and potential, is now in danger of becoming merely a figure of speech. Particularly may this be said of the women of to-day, who blindly follow the decree of fashion that undergarments of silk and artificial silk, cotton, and mixtures of all three should be worn. A recent issue of "The Bradford Textile Argus" says:—"With its high standard of living, Australia, despite its small population, offers a very large scope for the use of artificial silk (her imports of silk yarn being valued at £698,472 in 1928). The demand for silk goods is at present out of proportion to the size of the population when compared with the requirements of other countries. It is rather a reflection on human nature that Australia's population, so dependent on wool for prosperity, should be so much to the forefront in the use of artificial fibres."

Wool Trade.

Business transacted in the Australian wool market for March was poor, being £2,506,164, as compared with £6,252,226 in March, 1929. The total wool business up to the end of March amounted to £23,026,557, showing a decrease of £26,054,479, as compared with the first nine months of last season, when business totalling £49,078,037 was transacted.

The Queensland Clip.

The Queensland clip has shown decided growth during the past two years. Production in the State in 1917/18 was 314,348 bales. It gradually ascended, reaching 430,000 bales in 1925-26. Owing to a drought, a decline then set in, only 340,000 bales being grown in 1926-27. It, however, reached 419,000 bales in 1928-29, and is expected to touch record figures this season.

The Cotton Industry.

In a statement made at Canberra about the middle of April Mr. Theodore said that negotiations had been conducted for some time between the British and Commonwealth cotton interests with a view to the establishment of spinning and weaving mills in Australia. Two or three firms are contemplating the establishment of factories. Raw cotton and lint grown in Australia will be treated in the factories.

The value of imported cotton goods into Australia was £11,000,000 yearly, but, under the new tariff, he calculated that it would be possible to make £3,000,000 worth of this here.

Inaugural Meeting of the C.D.A.C. in Brisbane.

At the inaugural meeting of the Cotton Development Advisory Committee on April 14 proposals for the development of the cotton industry in Queensland were discussed. The Acting Minister for Trade and Customs (Mr. F. M. Forde) and the Minister for Agriculture (Mr. Walker) were the principal speakers.

Mr. Forde said the object of the Committee was to consider anything that would help in the sound development of the cotton industry, and to advise the Government

(Continued on page 142.)

March Exports of Wool

The following statement shows the exports of wool from Australia, according to countries of destination, during the month of March, 1930.

Destination.	Greasy Wool.		Scoured Wool.		Wool Tops.	
	lb.	£	lb.	£	lb.	£
United Kingdom	18,748,138	829,083	2,737,929	181,436	—	—
Canada	43,503	2,292	10,043	1,103	55,193	9,968
India	249,447	12,150	67,085	4,253	—	—
New Zealand	9,496	182	—	—	—	—
Belgium	6,327,159	189,518	225,747	12,037	—	—
Czecho-Slovakia	122,528	5,135	—	—	—	—
France	17,181,584	615,059	428,732	25,784	—	—
Germany	9,246,471	353,107	270,957	17,956	—	—
Italy	2,857,664	106,197	8,926	649	—	—
Japan	9,365,016	429,906	18,710	1,448	1,517	120
Netherlands	54,227	2,422	—	—	—	—
Norway	—	—	2,338	119	—	—
Spain	113,044	5,261	—	—	—	—
Sweden	90,682	3,971	5,048	366	—	—
U.S. America	3,999,507	210,970	106,759	8,015	—	—
Total	68,408,466	2,765,253	3,882,274	253,166	56,710	10,088

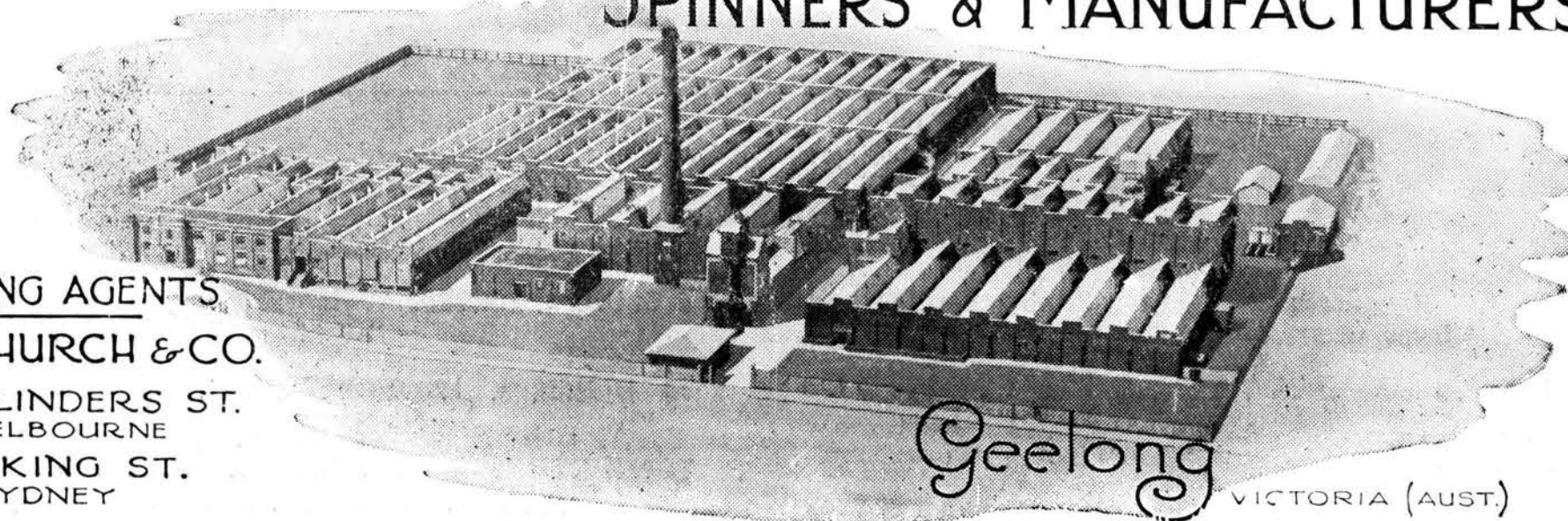
Gross Wool Exports.

	February.		Eight Months.	
	1929.	1930.	1928-29.	1929-30.
	£	£	£	£
Greasy	8,164,377	3,521,004	39,435,903	21,609,449
Scoured and washed	340,991	178,411	3,785,344	2,411,339
Tops	260	—	106,418	62,370
Total Exports	8,505,628	3,699,415	43,327,665	24,083,158

Valley Worsted Mills

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World's Cotton Trade (in 1000 Centals—1 Cental Equals 100 lbs.)

COMPILED BY THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

Countries.	December.		Five Months (August 1-December 31).				Twelve Months (August 1-July 31)			
	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.		
	1929.	1928.	1929.	1928.	1929.	1928.	1929.	1928.	1928-29.	1928-29.
Exporting Countries—										
United States	4,855	5,730	181	198	22,240	25,618	701	758	43,257	2,288
Argentina	4	31	—	—	139	280	—	—	578	—
India	1,173	1,074	26	18	4,440	4,367	148	84	15,441	452
Egypt	853	825	—	—	3,256	3,554	—	—	7,848	—
Australia	—	—	—	—	—*	7*	2*	7*	11	13
Importing Countries—										
Germany	141	119	1,089	1,016	763	628	4,286	3,818	1,728	8,931
Austria	—	—	55	88	2	2	245	313	4	699
Belgium	13	13	216	119	55	35	847	842	93	1,993
Denmark	—	—	7	7	—	—	51	37	—	117
Estonia	—	—	13	7	—	—	62	44	—	115
Finland	—	—	13	22	—	—	73	84	2	181
France	24	53	1,054	1,014	88	273	3,364	3,307	474	8,023
G. Brit. and N. Ire.	31	46	1,958	2,247	271	326	6,486	6,865	840	15,763
Hungary	—	—	40	24	—	—	119	82	—	223
Italy	2	—	520	454	4	—	2,064	1,903	2	5,234
Latvia	—	—	—	—	—*	—*	29*	20*	—	62
Norway	—	—	4	2	—	—	20	13	—	35
Netherlands	2	—	128	90	4	2	423	597	7	990
Poland	2	4	108	141	13	15	608	672	35	1,554
Sweden	—	—	53	51	—	—	212	192	—	456
Switzerland	—	—	90	82	—	—	298	300	—	670
Czechoslovakia	18	20	273	328	84	86	1,129	1,221	185	3,047
Yugoslavia	—	—	15	7	—	—	71	64	—	165
Canada	—	—	132	187	—	—	529	624	—	1,539
Ceylon	—	—	—	2	4	2	7	9	9	24
Japan	20	77	1,019	1,616	82	342	4,460	5,132	873	14,943
Algeria	2	7	—	—	4	9	2	2	24	7
Totals	7,140	7,999	6,994	7,720	31,449	35,546	26,236	26,990	71,411	67,524

* Data till November 30.

† Data till September 30.

Physician

BLANKETS and FLANNELS

WHICH STAND THE TEST

MANUFACTURED BY

COLLINS BROS. PTY. LTD. WOOLLEN MILLS, GEELONG,

VICTORIA, AUSTRALIA.

(Continued from page 138.)

on land settlement, the enlargement of production, experimental work, and marketing activities. The manufacturers had assured him that next year between 20,000 and 25,000 bales of Australian lint would be required, and that a plant would be established in Brisbane within the next six months to take 6000 to 8000 bales a year.

Mr. Walker said he fully realised the necessity for increasing the production of cotton in Queensland. He wanted to see an army of industrious people growing cotton, and he would co-operate with the Federal Government in every way. He did not think the industry had had a fair chance in the past, but there was a wonderful future for cotton growing in Queensland, provided they developed it on sane lines, and did not create a stampede for land. In view of past experience in land settlement, they must be extremely careful. The creation of a land boom, with a false buoyancy, which may ultimately mean ruin, must be avoided at all cost. He would like to see cotton developed in the Callide, Cooktown, and Lockyer districts. The Department of Agriculture intends to make developmental experiments in the far north, following the advice of its experts.

Mr. H. Webster, manager of the Queensland Cotton Board, thought Mr. Forde was too optimistic in his estimate of 25,000 bales next year. They had to go steadily, as it would be a great mistake to bring about a very great increase in production in one year. He did not think that more than 15,000 bales could be expected next year, and only a superhuman effort might increase the production to 18,000 bales.

Mr. W. Wells, cotton specialist of the Department of Agriculture, said there was not the slightest question about the suitability of the Upper Burnett and Callide for the production of cotton on a large scale, and in Southern Queensland there were hundreds of thousands of acres quite suitable for cotton growing. He agreed with Mr. Webster that 15,000 bales was all they could reasonably hope for next year, and that it would be unwise to try and go beyond this figure.

A committee was appointed to draw up a detailed agenda paper for the next meeting.

Jute and Woolpack Sales.

Overseas reports indicate very little change in the market for jute goods. Woolpacks in the hands of

Queensland distributors are a little firmer. Inquiries are being made from country centres, but little business is reported.

Silk Made of Pineapple Fibre.

During a residence of some fifteen years in various parts of North Queensland, I was sometimes shown curious novelties from very small experimental industries. A beautiful silk of the colour of the heart of the fruit was made by some Chinese at Port Darwin; it was hand woven on a small wooden frame or loom about 24 inches in width, the silk being exactly 18 inches wide.

This silk was woven from pineapple fibre and was not stiffened by any sort of dressing, nor had it any admixture of other fibres. It was made into dresses for Europeans by the Chinese tailors (who also used to make white duck suits for men at a cost of 16/ per suit that wore literally for a lifetime). In my family the silk was in constant use for six years, and was washed by the Chinese laundryman once or twice each week. It was a firm, close mesh and resembled a fine milling silk. The price it brought in Darwin and at Thursday Island was 1/8 a yard.

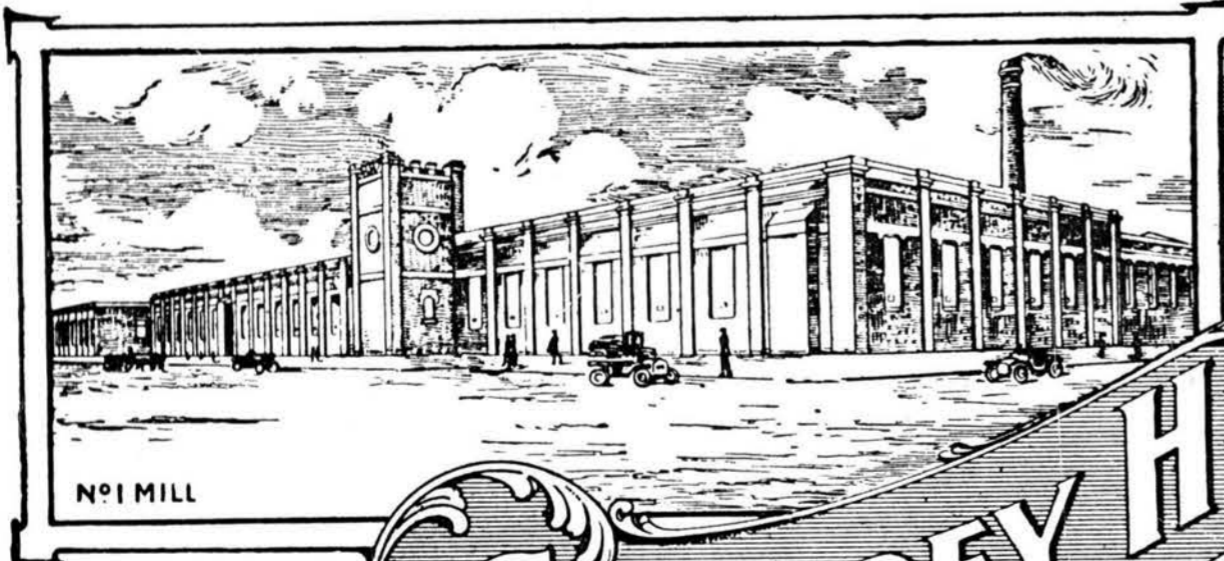
Sida Retusa Rope.

Another uncommon example of weaving was the use of the long stapled fibre of "Faddy's lucerne," or sida retusa, to make ropes for farm use. I did not see the process, but was shown various strengths of binding twine, clotheslines, and a very strong rope which I think was used at the well for hauling water. This was made by a farmer on the Casino branch of the Richmond River, over twenty years ago. He also had woven the curtains for their living room from the beaten bark of a tree. The material was bound and stitched with palm fibre and painted or dyed with the juice of wild fruits. This man could neither read nor write, but he could weave reeds and lawyer cane, bark, fibre and sida into both useful and beautiful things.

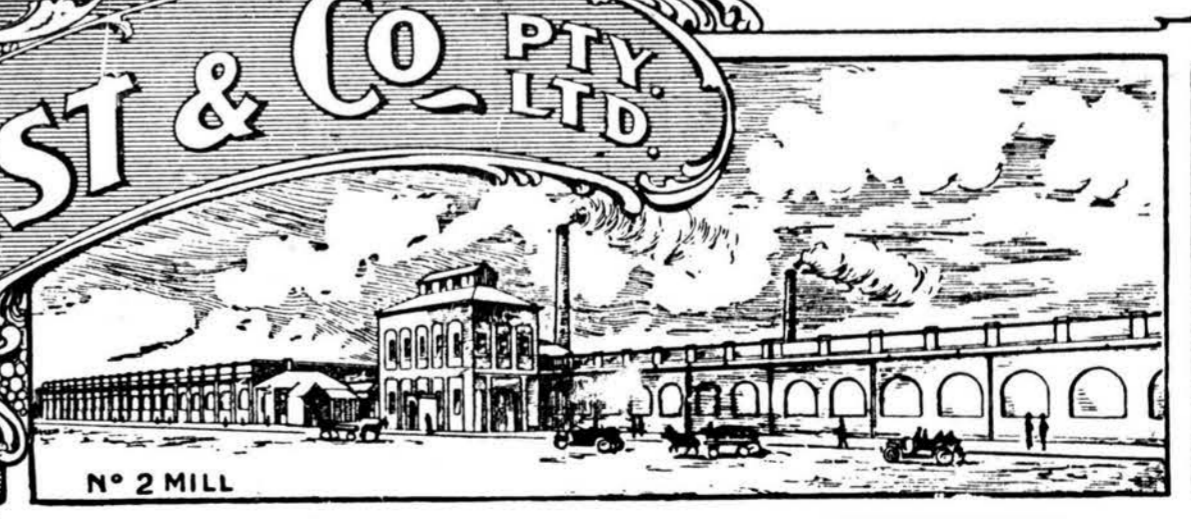
Mr. C. T. Green, of the Julius Kayser Co., of New York, who arrived in charge of a party of hosiery specialists ex Sierra recently, struck some trouble with the Customs authorities on arrival in Sydney. This was speedily overcome. Mr. Green took the whole matter philosophically.

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WORSTED MILLS NOS 1 & 2**

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Nº 2 MILL

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Geelong, Vic.

SOUTH AUSTRALIA

(From Our Own Correspondent.)

Good Clearance of Wool.

Brisk competition was the rule at the April wool sale, but, unfortunately, average prices did not reach the level established in February, despite the fact that about 5000 bales from the south-east were included in the offering. Growers were looking for an advance. The only satisfaction they have is that the catalogue was practically cleared, and very little of the old season's clip remains to be sold. New wools coming in from the early northern districts will comprise the bulk of the offerings at the next sale, which is scheduled for June 6. Brokers hope for an offering of 22,000 bales, but indications at the moment suggest that it may be difficult to get together more than 15,000 or so. This is a striking illustration of the terrible time the north has gone through. In normal years 40,000 bales could easily be benched for the first sale. To-day stations that used to send in a clip of 400 or 500 bales find it difficult to raise 100. The deliveries at the storerooms during the next few months will reveal how hardly the pastoralists have been hit, and as wool is one of our biggest products it looks as if this State is likely to experience hard times for at least another 18 months.

Use More Wool Campaign.

As a rule the public displays little interest in "Use more—" campaigns and "Back to—" movements. There seems to be a different feeling, however, with regard to wool. The fact that Australia's wool cheque has been cut in half has impressed women—who, after all, control the purse—that the jobs of their husbands and sons are unsafe unless industry is supported, and there is, therefore, a definite movement against foreign artificial substitutes for woollen goods. The ground is fertile for the sowing of the "Use More Wool" seed, and there is every prospect that the publicity campaign will produce good results. Australian and Empire products are getting a vastly better hearing than has been the case in the past. Everywhere the fact seems to have soaked in that it is useless to go on in the bad old way buying cheap foreign substitutes. Apart from economic necessity, there is an added inducement through the fact that improvement, particularly in Australian-made articles, is constantly taking place. It is safe to say that two-thirds of the men in Adelaide are now wearing suits made from Australian material, and are quite satisfied with it too.

Seasonal Outlook Disquieting.

Hope of better things for the current year is based on a bumper wheat harvest. At the time of writing the prospects are not encouraging. Except for scattered falls for a couple of days in the northern wheat belt, there has been no rain since last Christmas. Farmers are satisfied if the weather does not break until June, but it would take several mean average annual rainfalls to put some of our districts right. Without rain every week for three or four months, it is useless to hope for a 50,000,000-bushel harvest. Even 20,000,000 cannot be expected if present conditions continue. Last month we had a change of Government, and the new Premier (Mr. L. L. Hill) laid

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Blankets are unsurpassed.
And they're as durable as
such materials can be. Sold
all over the Commonwealth.

Manufacturers:

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it rather unctuously to his soul that rain began to fall directly the Labour Party came into power. It is a singular fact that Liberal Administrations have usually been in office in times of drought, while Labour has been fortunate to experience years of plenty, but it is a rotten reed on which to hang rainfall expectations. Everything points to the new Government having a hard time.

Trade Keeps Its End Up.

In all the circumstances it is remarkable how trade maintains its volume. With most of the firms, big and small, the worst of the financial storm appears to have been weathered. There is a firmer tone everywhere, and far fewer rumours are abroad regarding the instability of leading companies. Money is, of course, tight, but that is a world-wide manifestation. To meet the position hands have been shortened, and short time is fairly general. This means a swelling in the ranks of the unemployed, and to preserve their health and morale it is suggested that an unemployed industrial colony should be formed near Willunga, in the south, where these men, mostly single, would be instructed in primary industry. The scheme has been generously supported by leading citizens, and something may come of it. Most of these raw hands would be engaged in sheepraising, agriculture, poultry, pigs, etc. Experienced men find it hard to make those industries pay just now, so what success will meet the inexperienced is problematical. Anyhow, the experiment is worth it, even if it does no more than remove the pathetic sight of hundreds sleeping on the bank of the Torrens, herding in old Government buildings, or seeking a night's rest in empty railway carriages.

Bonus on Gold.

Commercial men here are interested in Senator McLachlan's scheme for a gold bonus, with the object of producing sufficient gold to wipe off Australia's external debt. Bankers have declared it to be sound. The trouble is to find the gold. If large quantities of it were discovered, a bonus would probably be unnecessary. During the past few weeks a golden stream has been poured into the Stock Exchange in support of the new field discovered at Edjudina, in the west, and other expeditions have invaded the Northern Territory, looking for likely fields. The interest in these mild "booms" lies in the fact that at the slightest prospect of a profitable investment Adelaide never lacks a supply of ready cash. It is this stored

resource that will keep things going until we strike a run of better years.

No Money to Advance on Land.

We have had a visit from Messrs. F. Batho and Mark Young, two members of the British Empire Farmers' Party, who examined New Zealand. Incidentally they took a look over parts of Australia. "I cannot see any bright prospects ahead for the primary producers of the Commonwealth unless the cost of production is reduced," said Mr. Young. "Your land is too dear, your wages are too high; in fact, the price of everything is too great." Hard times are correcting these faults. There is a steady drop taking place in the cost of living, and the fall in value of farming land has been severe. The latter development is due to the absence of mortgage money. Not long ago a wheat and sheep farmer came into town and announced that he had bought his neighbour's farm for about £20,000. "Glad to hear you have the money to do it," said his solicitor. "But that is what I have come for," replied the farmer. "Well, there isn't any money in this town to advance on land," said the legal man, cheerlessly. The farmer refused to believe it. It was against all history! He would show how it was done. A few days later he came back and admitted that not a bank or a private lender would advance a penny. The story, which is a true one, shows how finance has tightened up, compelling people to make an effort to live within their means. It is the only means by which this purely agricultural State will emerge from its difficulties.

NEW USE FOR COTTON.

While strenuous efforts are being made to discover new uses for cotton, some interesting suggestions are coming forward. One, announced recently in a daily paper, discloses the result of a four-years' experiment by a Clerkenwell inventor, who claims to have perfected a synthetic wood, which is said to be a compressed and hardened cotton material containing 90 per cent. of cotton. It is further claimed that this new material is indistinguishable from wood, is stronger, but lighter and cheaper, and can be moulded, sawn or turned on a lathe. In addition to possessing all the advantageous features of expensive woods, it will not warp, and withstands the effects of heat and water.—"Textile Exporter."

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Tasmania

LAUNCESTON.

(From Our Special Correspondent.)

The textile mills in Launceston are doing good business. Mainland orders are gradually increasing in number and quantity. The prospects are encouraging, owing to the exclusion tariff, one effect of which should be the increased popularity of Australian-made goods. The products of the local mills are of a high quality, which is appreciated by users. Waverley blankets are in good demand, and the mill is kept busy fulfilling orders. The Reliance Woollen Mill is fully employed, and has good orders on hand to last for several months. Paton and Baldwin's spinning mill is working at full pressure, and their exports are expanding every month. The other mills are kept going, and the proprietors are satisfied with the volume of increasing trade.

Wool.

A fair quantity of wool was sold last week by private treaty subsequent to the last auction sales, and the prices obtained represented in almost every case a considerable advance on those bid at auction. Lambs' wool brought the highest price for the clearing-up series, being 11½d. per lb. for a choice lot of fine crossbred of good length. All qualities of sheepskins showing any length of wool were in keen demand at slightly higher values. Larger quantities of sheepskins are now coming to hand, and all grades are meeting with a good inquiry at prices well up to the mainland parity.

The wool season in Tasmania showed a decline of 40 per cent. in prices compared with 1928-29. The clip was 45,493 bales, compared with 45,789 bales. The quantity sold was 42,355 bales, against 43,486. The amount realised was only about half that of the previous season—£580,544, compared with £1,042,863. The total weight of the clip was 11,663,128 lb., against 12,405,247 lb. The average weight per bale was 274 lb., compared with 285 lb. last year, and the average price per bale £13/14/3, against £23/19/9. The average price per lb. was 11.98d., compared with 20.17d., which is a serious decline. But the woolgrowers have had a number of good seasons and high prices, and they are hoping that there will be a marked rise before long.

Exports.

The Tasmanian exports for the seven months ended January 31 were valued at £5,035,000, representing an increase over the corresponding part of last year of £404,000, or about 9 per cent. There was an increase in wool of £61,000, and in textile and manufactured fabrics of £8000. There was a net decrease of £20,000 in woollens and worsteds, but an improvement is anticipated in the coming months.

Local Trade.

The drapery and clothing shops are experiencing the usual autumn dullness, but they are satisfied that it is only the usual drop, and with winter upon them the demand for blankets and heavier wearing apparel will increase.

Flax.

The growing of flax in Tasmania is rapidly increasing, and considerable areas are now being sown. Certain portions of land appear to be eminently suited for flax, and farmers are devoting a good deal of attention to the industry, which promises to be profitable to the grower. Threshing operations are now in progress, and very satisfactory results are being obtained. Requests for seed have been received from the mainland. There has been a change in the personnel of the board of directors of the Flax Corporation of Australia Ltd., Messrs. W. Robinson (chairman), A. W. Monds and J. S. Dean having resigned in order to allow Messrs. R. Grice, Edwin Morrisby and W. S. Hallett to take their places on the board. Certain financial arrangements are being concluded, which, it is expected, will have a marked effect on the expansion of the flax industry throughout the State.

ANGORA WOOL.

A Warning to Australian Breeders.

On May 1 the Minister for Agriculture and Stock received, through the Agent-General, from authoritative sources in Great Britain, additional information of interest in connection with the market prospects for Angora rabbit wool and Chinchilla pelts. Mr. Walker said that one of the largest spinning and manufacturing firms in Great Britain had pointed out that, owing to overproduction during the past two or three years, the Angora wool market was very much overcrowded. It was also suggested that it was impossible at present to absorb all offers, and, as the firm in question was able to cover all its requirements for the British type of wool, there seemed to be no immediate prospect of buying operations being extended to other countries. The Agent-General was advised that supplies of Angora wool were much in excess of demand, and that prices were much lower than formerly. Angora wool of first grade now yielded about 23/ to 24/ per pound to the producer. Chinchilla pelts were down 25 per cent., and good pelts were only bringing 5/ each. The Minister remarked that the information disclosed in the reports indicated the necessity for the exercise of caution and discrimination by breeders of wool and fur-bearing rabbits.

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VICTORIA MELBOURNE MARKET.

(From Our Own Correspondent.)

Changes in the economic outlook during April were for the better, but the immediate position became, if anything, somewhat worse. The month was broken by the Easter and Anzac Day holidays, with more than the normal dislocation of trade, due to the fact that, in many cases, manufacturing establishments were closed for a longer period than usual. The widespread rainfall after Easter has given hope of a good pastoral and agricultural season, though further downfalls are required. Some districts of the State, particularly in the north, received only light falls, and rain is urgently required there. Wool prices recorded a substantial improvement at the Melbourne sales at the close of April and early in the current month. The outlook in regard to Government finance is better. When the conversion of the 6 per cent. Commonwealth loan due in December next was closed it was found that only some £18,000,000 of the issue was outstanding, and the conversion or redemption of that amount on maturity should present little difficulty. Commonwealth 6 per cent. stock and bonds maturing in 1937 were sold over the counter by State Treasuries for some time after the closing of the conversion offer, but the Federal Treasury decided late in April to withdraw them from sale. In some quarters a new cash loan of some £5,000,000 to £10,000,000 has been forecast, and it has been suggested that a rate of interest slightly lower than 6 per cent. would be offered, possibly a 5½ per cent. issue at a small discount. Commonwealth securities on the Stock Exchange have been firmer in price since Easter, but throughout April the market for industrial and trading shares was weak, with, generally, a moderate easing in prices. Buying support was lacking, and forced realisations by holders requiring money were mainly responsible for the downward movement.

Victorian trade returns for March disclose a reduction of imports, as compared with those for March, 1929, of some £430,000. However, exports for the month were less by some £2,394,000 than those for March, 1929, even though £2,030,000 in gold was shipped, against £1,000,140 in March last year. For the nine months ended March 31 imports, at £34,546,917, are less by £441,511 than those

for the corresponding period in 1928-29. Exports at £29,220,028 are down by £2,383,973, but they include £12,658,156 in gold, against £1,263,887 in 1928-29. The excess of imports for the nine months is £5,326,889. Among imports, apparel and textiles, at £10,717,255, compare with £11,096,291 for the corresponding portion of the previous year, and, among exports, wheat at £537,350, compares with £4,583,709, and wools, at £5,084,181, compare with £12,683,564.

General Trade Conditions.

The month was broken by the Easter and Anzac Day holidays. From the end of March there was a slight improvement in business, but this did not hold, and trading petered out in the week before Easter. In normal times business is fairly active right up to the time of closing for Easter. In the last week of the month, however, there was a moderate revival in trade. Colder weather has forced some buying of winter goods.

Silks and Art Silks.

Artificial silks are continuing to move out fairly freely, largely for use as linings. In some quarters there has been recently a revival of demands for real silk, stimulated by the general decline in prices for this class of goods, and attributable largely to the lack of elasticity and difficulties encountered in manufacturing the artificial product.

Cottons and Linens.

The position is much the same as at the time of our last report, but there is a tendency for prices to firm locally, owing to the difficulty of importing. Stocks of cotton goods are said to be slightly lighter, but the pinch has not been felt yet; in some quarters it is expected that the position may be a little difficult within about two months.

Woollens and Worsteds.

Overcoatings, in regard to both ready-made lines and materials, are moving a little, but mills have been slack, particularly in the last month, and are reported to be working reduced time. Owing to competition, prices are, in some cases, lower. There is, however, a relatively increased demand for Australian cloth, as against the imported goods, owing to the duties and to the cost and difficulty of arranging exchange. Some firms, which are normally indentors, have been in the market for Australian cloth.

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Company News.

Younghusband Ltd., woolbrokers, etc., has declared a final dividend for the year of 5 per cent., with a bonus of 2½ per cent., making 12½ per cent. for the year, against 15 per cent. for 1928-29, payable on May 20. The distribution was larger than had been expected in many quarters, many having anticipated the elimination of the bonus.

A new department for the manufacture of full-fashioned super mercerised lisle hosiery is to be installed by **Prestige Ltd.**, and it is hoped that within twelve months 200 additional employees will be engaged. It is expected that full-fashioned cashmere and cashmere and silk mixture stockings will be produced at a later date. There is a considerable demand for super mercerised lisle stockings, and, with modern machinery, the company expects to be able to supply the goods in quality as high, and at prices as low, as those lines supplied by manufacturers overseas.

At a meeting of shareholders of the **Ballarat Woollen and Worsted Co.** on April 28, it was agreed that an issue of 10,000 preference shares was necessary to carry on the operation of the mills. All but 418 of the new issue of shares was taken up, and promises to subscribe for some of those available were made. More than 500 shares were taken up by employees.

Wool.

Satisfactory sales in London in the first half of April, and in Albury and Adelaide, had led to expectations of improved conditions in the Melbourne market, where sales were resumed on April 28. The selection submitted on that day was good, and competition was strong throughout, Continental buying being the main feature, with America and Japan also in the market. Prices were from 5 to 7½ per cent. higher than those ruling at the close of the Victorian March series, and almost complete clearances were effected. Similar conditions prevailed on the following day, opening sales being fully maintained. On April 30 a further good selection was submitted, and prices were still firmer, or about 10 per cent. above those at the close of the March series, and a strong market ruled again on May 1, when prices were again a shade firmer.

Figures prepared by Winchcombe, Carson Ltd. disclose the effect of pastoral conditions on the quantities of wool received into store throughout Australia. Compared with the corresponding period in 1928-29 the quantity of wool received into store to March 31 declined by 6 per cent. in Sydney, 7 per cent. in Brisbane, 7 per cent. in Victoria, 18 per cent. in Adelaide, and 7 per cent. in Western Australia.

SHEEP RAISING IN THE STATE OF MAINE.

Sheep farmers in the State of Maine are taking increased interest in their flocks, and, according to the "Textile American," have been buying animals from western ranges, through the assistance of the State Department of Agriculture, that new and strong strains of blood may be introduced. Several hundreds of such sheep have been secured.

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GEELONG NEWS

(From Our Special Correspondent.)

An Important Visitor.

The Acting Minister for Customs (Mr. Forde) paid his first visit to Geelong on April 24, and was accorded a mayoral reception. He was afterwards shown over the local woollen mills, and was agreeably surprised at their size and importance.

Trade Slack.

Owing to the Easter holidays, including Anzac Day, many firms closed for ten days, and trade was practically at a standstill. So far the recent tariff restrictions have made no beneficial impressions on local concerns generally.

Wool.

At the sales held on May 7 and 8 a total number of 18,000 bales were offered, the selection comprising a large quantity of good Western District wools.

From July 31, 1929, to the end of April of this year 152,865 bales of wool have been consigned to Geelong, as against 169,458 bales for the same period of the previous year, marking a decline in wool traffic.

Presentation at the Albion Woollen Mills.

Upon relinquishing duties in the weaving department of the above firm Miss B. Dean was presented with a beautiful clock and vase. The presentation was made by Mr. C. Stobbart, weaving shed foreman, who said he hoped it would serve to remind Miss Dean of her many loyal friends at the Albion Mills.

An Interesting Paper.

In an interesting paper entitled "A National Stock-taking" read to the members of the Rotary Club, Mr. E. R. Bartlett, Secretary of the Standards Association, stressed the need for a greater measure of standardisation in industry.

Senator Guthrie on the Economic Position.

Interviewed on the economic position of Australia, Senator Guthrie stated that our financial and industrial troubles are due to the bald fact that our primary products are down £40,000,000 for the year. The collapse of wool values is chiefly responsible for this decline. Until such time as the balance of trade between the two countries was on a more equitable basis, we were looking for trouble if we continued sending £30,000,000 per annum to the United States of America for cars, motion picture films, hats, silk stockings, etc.

Presentation at Collins Bros.' Mills.

On behalf of the employees of the Marnock Vale Mill, Mr. C. Ayling, foreman of the finishing department, presented Miss L. Whale with a 400-day clock. This presen-

tation was mainly organised by the young ladies of the mill.

Boys and Girls' Week.

Remarkable success attended the "Boys and Girls' Week" celebrations under the auspices of the Geelong Rotary Club. Local textile mills were visited by parties of young Australians, who evinced keen interest in all they saw. Culminating a week of activities, 1700 boys and girls marched through the streets of the city.

Personal.

After 50 years' service in the State Savings Bank, Mr. H. W. McCre, who has been manager of the Geelong branch for 29 years, has retired. His position will be filled by Mr. T. L. Irvine, accountant at the Elizabeth street (Melbourne) branch.

Mr. T. Welsh, manager of the Albion Woollen Mills, has been on a business trip to Sydney.

Mr. A. Schofield, manager of the R.S.S. Woollen Mills, was congratulated at the weekly luncheon of the Geelong Rotary Club upon his re-election as president of the Victorian Manufacturers' Association.

The flags at the local wool stores were flown at half-mast respecting the memory of Mr. D. S. Oman, of Lismore, who was a client of the firms. The late Mr. Oman was a member of the Legislative Assembly for 27 years.

Mr. H. W. Whiddon, ex-Commissioner of Taxation, is entitled to the credit of being one of the first men in Australia to recognise the commercial possibilities of wools for export.

NEW SOUTH WALES AGENCY WANTED For Victorian Manufactures.

Advertiser desires to secure the representation of reliable Victorian manufacturers in either of the following lines:—

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Ballarat

(From Our Own Correspondent.)

In its present building the activities of the Shem-Tex mill are so "cribbed, cabined and confined" that, even with continuous working and the occupation of three shifts per day, the management is unable to keep pace with orders. Special inducements have consequently been made to the contractors for the new factory at Ballarat North to expedite the work. The structure is nearing completion. The next difficult task will be to dismantle the plant at present doing service and transfer it to the new factory, where a large portion of the new machinery has already arrived.

New life, it is expected, will be given to the Ballarat Woollen Mills Co., which, after carrying on for over half-a-century, has been reconstructed. Mr. A. K. Grainger is at present in charge. All the required new capital has been subscribed, chiefly by Ballarat citizens. Up till April 27 the whole of the 10,000 9 per cent. cumulative shares offered had not been absorbed. At a meeting held on that date the chairman (Mr. A. Bell, M.L.C.) pointed out that there were still on hand 3000 preference shares; with the exception of 400, these were taken up in the room. Amongst the leading citizens interested are Messrs. F. Herman, W. H. Figgis and S. Clark.

On account of the Easter holidays Messrs. E. J. Strickland held their April wool sales earlier than usual. The market was about on a par with prices realised at the previous sale, with the exception of super wools, which were 5 per cent. higher. Oddments and skirtings also sold at better rates. The catalogue consisted of medium to good fleeces and a good offering of lambs' wool. There was also a quantity left over from the March sale. In only a few isolated cases did values exceed those of the March sales. The highest price realised was 13d. per lb.

Warehousemen's Profits

A Reply to Mr. H. M. Chisholm.

Several of the leading wholesale distributors of woollen and worsted piece-goods have communicated with us concerning Mr. Chisholm's article on the woollen industry of Australia, which appeared in our last issue, with particular reference to the section headed "Warehousemen's Profits." They suggest that his warehouse experience was not obtained in Flinders lane since the war, as under present-day trading conditions his figures are misleading. It is patent to all observers that a vast change in trading conditions has taken place during the past decade. The trade in pre-war days, in the main, depended on its supplies from overseas, and was able to show very wide ranges of exclusive goods, whereas, owing to the fact that Australian mills can make only for the limited home market, the ranges available for selection have become very much reduced. This has led to very keen competition, with the resultant severe pruning of advances on cost. It is also common knowledge that overhead expenses, such as salaries, rents, costs of pattern bunches, etc., are very much heavier than in pre-war times.

As a result of the foregoing brief summary of altered trading conditions, they point out that a "33 1/3 per cent. advance on gross landed cost of goods" is definitely unobtainable to-day; that overhead expenses must be advanced by 25 per cent. on Mr. Chisholm's figure; and, finally, add that they would be indeed happy if net profits equalled half the figure suggested by Mr. Chisholm as "quite fair."

"MADE IN AUSTRALIA" CARDS, &c.

The "Made in Australia" Council desires to notify woollen mill proprietors and hosiery manufacturers that it has stocks of "Made in Australia" cards, posters and streamers suitable for displaying in factories and workshops, which will be supplied free of charge on application to the secretary, room 119, 1st floor, Manufacturers' Buildings, 312 Flinders street, Melbourne.

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The Dobicross Dobby

Specially written for this Journal by J. W. Hutchinson.

One of the finest shedding mechanisms ever invented is that of the Dobicross dobbie. It is the particular movement imparted to the heald shafts that makes it of outstanding merit. The heald shaft movement begins slowly where the tension is greatest, gradually increases the speed to the centre, where the tension is the most relieved, and then gradually slows down the movement as the tension develops. To put the movement in words, it is: Slow, medium, fast, medium, slow. This is obtained by a connector being fixed to a right-angled jack lever at one end and to a vibrator wheel at the other. The vibrator wheel is made to make half a revolution whether the shaft is needed up or down, by being brought into contact with the teeth on the top or bottom cylinders. Though the mechanism is cleverly constructed there are several points that need special attention.

The cylinder which rotates the lags must be very accurately set. There are two settings, the first being the horizontal one, having each bowl directly underneath its own vibrator lever. The second is its elevation, for, while the levers, with their attendant wheels, must be brought into good contact with the cylinder cogs, injury will be done to the cylinder if they are either too shallow or too deep in gear.

The lag cylinder has to be at the same elevation at both ends, so that the upward lift to the vibrator levers is the same at the back as at the front.

The timing of turning the lag cylinder is a very important matter, for if only a little too soon the lock knife, as well as the ends of the vibrators that protrude through the grate, will be subject to excessive wearing. A bowl should not begin to lift a vibrator until the lock knife is clear of the vibrator end.

When the ends of the vibrators are worn they are a menace to the safety of the bottom cylinder cogs, for the vibrator wheel becomes shallow in gear with the cogs of the bottom cylinder, and may damage them. Such vibra-

tors are better discarded. Another risk which an overlooker has to be on his guard against is that of a vibrator wheel being harder than the chilled metal of the cylinders. Such wheels are liable to cut through the cylinder cogs, and, though, such wheels may have part of the temper taken out of them by heating and slow cooling, they are better consigned to the scrapheap.

Recently three improvements have been added to the arrangement of the dobbie. The first is that the slide once used by the weaver for the elevation of all the vibrators has been superseded by a small lever, which, when moved, does exactly the same thing to the vibrators, and with very much less exertion. The second is that instead of relying on the soft end of a setscrew giving way when anything locks the lag cylinder, two levers, with springs attached, put the cylinder out of action, and so prevent further damage. The third is the converting of a once negative box motion into one of positive action. Formerly the box had to drop of its own weight, but now it is pulled down, as well as elevated, by chain action. This makes the box much more reliable, especially when several boxes have to be skipped.

The sprocket wheel idea is also to be commended for the chains to run over, instead of the flanged wheels. These latter were liable to hold when the wheel pins became worn, and this led to the rapid wearing of the chain. The sprocket wheel is bound to move with the chain, and for this reason is much more reliable. The adjustment of the boxes takes a little longer, but the positive action is worth the extra time.

Sir James Murdoch possesses other interests outside of those associated with the prices of woollen and cotton goods. Since he purchased Bendooley, near Berrima, some time ago, he has endeavoured to prove that his native Scotland can produce something more valuable than porridge. His Aberdeen Poll-Angus stud cattle are in the first flight. Black Mahdi, an imported bull, secured grand champion honours at the Royal Show here.

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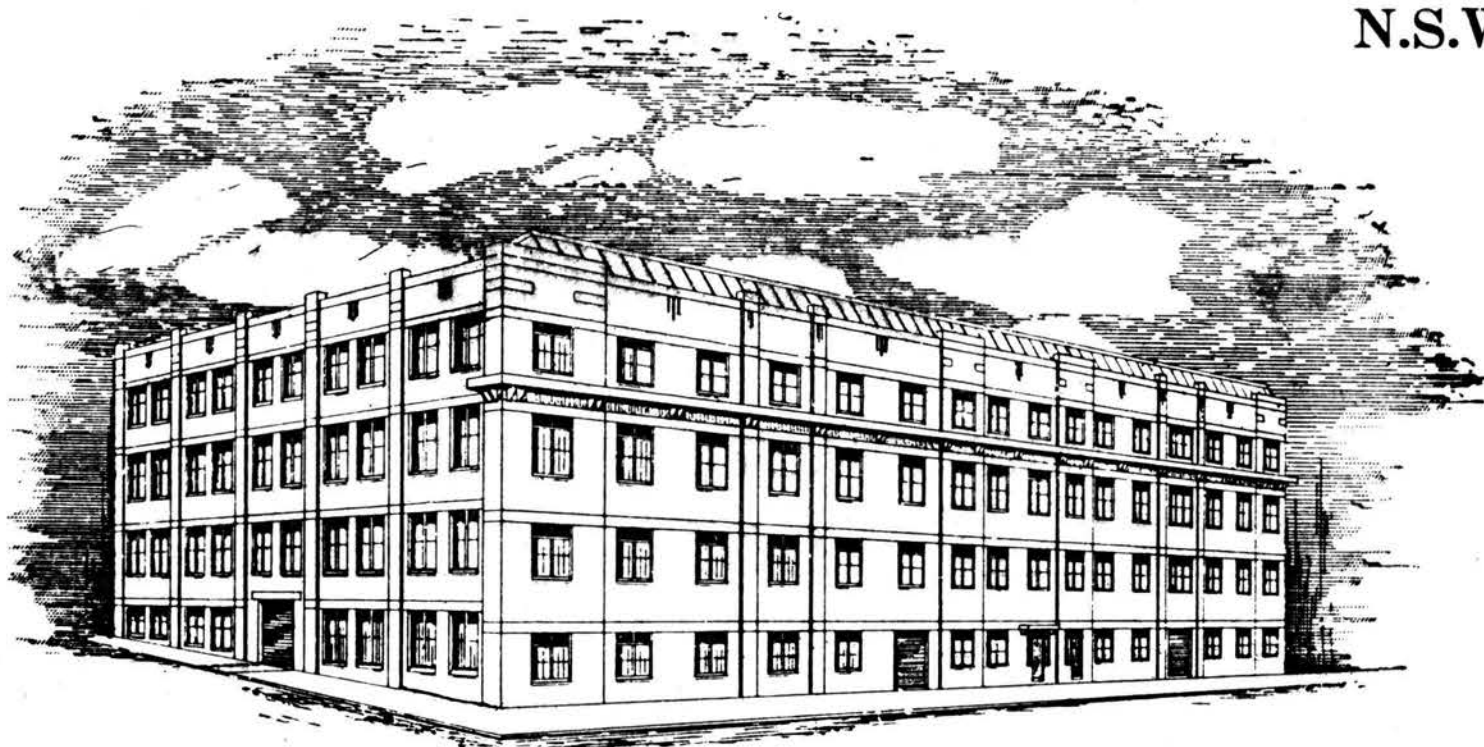
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Pruning the Plant Pay-Roll

By R. A. Soniaman

Holding labour costs to a minimum is much a matter of common sense plus a dash of that quality which is so essential to all industry—eternal vigilance. These two—backed by push.

It is the intention in this discussion to show how the matter can be handled in a practical manner. It may be said that the idea is applicable to the larger as well as the small plant, the former often being a more fertile field for a determined executive than the latter, because of the difficulty of following up due to the greater complexity of the larger concerns. For example, in a small mill the capable executive can usually keep a sharp eye on the labour cost personally, especially if he has some plan to go by, and follows it up at short periods; whereas, in the larger plant much of the following up has to be entrusted to department heads, with the result that, due to differences of opinion, lack of accurate knowledge as to just what constitutes a day's work, plus the inertia arising from a dislike to readjust the duties of some of the workers, the pay-roll is apt to become more or less loaded with dead wood.

A paramount element necessary for intelligent consideration of the proposition is that of knowing approximately what the production requirements will be for short periods of time in the near future. Obviously a larger plant will need a greater degree of accuracy in its estimate of future orders than a small concern, owing to the larger number of workers involved in the former, and the disruption of the morale of the personnel where there are numerous changes in workers hired and laid off.

Having, let us say, a fair conception of the quantity to be turned out, the next step is to draw up a chart of the machinery required, and of the numbers of workers needed to operate the machinery.

Naturally, it is necessary to know how many machines or units that a worker can handle in order to lay out an efficient low-cost organisation; therefore, mills not in possession of such standards of work should take steps to collect the necessary data. Quillers, winders, coners, spinning machines, speeders, twistors, reelers—in fact, the entire gamut of textile machinery is amen-

able to standardising for this purpose. Laying out the organisation on paper will give the executive an opportunity for analysing, then synthesising his corps of workers at the minimum practical figure.

Get Rid of the "Handy Man."

Before proceeding further it may be well to dispose of that nondescript character known as the handy-man. This individual is a prolific source of pay-roll inflation, and often a parasite that because of past custom or tradition is difficult to weed out. The duties of all so-called handy men should be put under careful scrutiny, those that are actually necessary being listed in the sequence in which they are to be done. On a par with handy men are fixers, oilers, truckers, spare hands, and so on.

A study of the duties of these workers with a knowledge of the time required to do them will often bring to light that a rearrangement of the duties can be made; some work perhaps could be dispensed with altogether, other duties so laid out that a greater period of time will elapse between recurrences. It is surprising what a number of cases will turn up where the duties performed are out of all logical reason. And the writer would add here that these anomalies occur in mills which apparently are splendidly managed as well as in those where things are somewhat slipshod.

Oftentimes a change in the sequence and the time of the duties will permit a consolidation of two jobs. An increase of a few shillings will mean practically the savings of one worker's wages here. Investigation soon discloses to a determined executive that the changes are not only logical, but are actually necessary to give the mill a fair break, as the saying goes.

Are All Your Spare Hands Necessary?

On a par with handy men are spare hands. It is not a good practice to use spare hands to help one here and there from morning to night. There is too much discrimination among the workers assisted when such a scheme is in vogue. Usually the most inefficient or deliberate slackers are the beneficiaries of this system, because the section hand and second hand want to keep their

(Continued on page 174.)

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Wool Market Review

*Specially written for this Journal by
"Electa"*

A break in the April series of sales in southern centres was caused by the Easter vacation, those prior to same being held in Geelong, Adelaide, and Albury, where all brokers reported good clearances under the improved demand, and a wider range of competition. Owing to the more confident tone and the stimulus given to the market there had been a tendency on the part of speculators to secure parcels to turn over. Tasmania and other outside centres have been revisited and wools left on hand from earlier in the year have changed hands at satisfactory prices. In addition, some of the regular buyers have received orders outside of their usual sphere, being commissioned to purchase shipments of wool for outside traders, endeavouring to cope with the exchange position.

On the resumption of sales after Easter further improved demand was noticeable, competition and general tone being certainly the best experienced this season, with the result that the market showed the following improvement on rates existing prior to the holidays:—

Super merino	7½ per cent.
Good average and topmaking sorts	10 per cent.
Comebacks and crossbreds	7½ per cent.

Lambs and locks showed little or no change. In fact, the former were as difficult as ever to dispose of, with prices in some instances on a lower basis even than hitherto. This applied to the super descriptions, on which a combination of buying interests had a marked effect.

Continental competition was most pronounced, France in particular being well to the fore, while Japan, local mills, and U.S.A. added strong support. Yorkshire, starting the week cautiously, operated with more freedom as the sales progressed.

Within a week values showed further improvement, and, with the exception of super to choice wools, which would be quoted in sellers' favour, all other descriptions showed an improvement on the Easter reopening as follows:— Spinners' type of merinos, 5 per cent.; comebacks, 5 per cent.; fine and medium crossbreds, 10 per cent.; oddments of all descriptions, 7½ per cent.; combing lambs, 10 per cent.; locks, 5 per cent.

The market reflected all the best features, the buoyancy and general tone auguring well for the near future.

At the close of the round in Melbourne, Japan was certainly the strongest buyer, the house of Kanematsu securing a wide range of wools, while Bradford spinners, the local mills, and Continent added strong support. Brokers' per bale and per pound averages show better results, but as yet only individual house figures are available. They are in the vicinity of 11d. per pound and £14 per bale, and speak for themselves.

A few outstanding prices obtained during the Melbourne series were 21d. for AW/Redwood, a choice 74/80s bought by the well-known French firm of Prevost and Lefebvre;

17½d. for Mountain View/WJC, and 16½d. for Rockgrove. All these were grown in the Western District of Victoria and were most attractive parcels.

At the Easter recess the Yorkshire brigade were somewhat perturbed at reports from Bradford relating to a strike of textile operatives, but evidently wiser counsels prevailed, and, much to the relief of the trade, the threatened dislocation has not eventuated.

The dispute was the result of the findings of Lord Macmillan, who recommended a reduction in the wages of time employees of 9.249 per cent., and of piece workers of 8.766 per cent. For some years now Bradford has been beset with the difficulty of producing goods which will compare with prices of Continental productions. Producing costs in the British industry are on a higher scale than on the Continent, and there are but few prospects of a change in fiscal policy. The home industry is in a critical position, with manufacturers at their wits' end.

Conditions in the Yorkshire trade have been getting worse during the past five or six years, and to-day we find the great northern county, where the populace think, talk and dream wool—in fact, depend on it for their very existence—a mass of gloom and depression. It would seem that the critical position would hardly allow for any strike.

All business has been conducted in a hand to mouth fashion, but now that there are definite signs of bedrock having been reached in raw wool values, a more encouraging tone is evident, and it appears as if the British trade will continue buying, despite the admitted financial and industrial difficulties of the county.

Continental Stocks of Tops.

Reports to hand from the Continent also indicate a more reassuring position. Stocks of tops are on the decline, and retail turnover in woollen goods is certainly improving, so that we have every reason to believe that future orders from such centres will more closely approach normal volume. Following the Easter recess, Continental competition was most marked, orders on this account being the backbone of the market.

The quantity of tops in Continental combing establishments showed a reduction of 6 per cent. at the end of February, as compared with January. Germany is holding a slightly larger quantity of merinos as compared with January, but her crossbred stocks are depleted to the extent of 20 per cent. France, on the other hand, shows a 3 per cent. reduction in merinos and 10 per cent. in crossbreds. Belgian totals also show a reduction, but reliable information as to exact figures is not to hand.

We are led to believe that stocks in Italy are appreciably lower than they were a year ago; certainly her purchases have been on a much reduced scale, and her buyers in Australia have been acting very prudently throughout the season.

In a general summing up, it is assumed that stocks of tops on the Continent at the moment would represent the lowest aggregate for some considerable time.

Japan has continued to be a strong buyer of crossbreds in southern centres, and towards the end of April, finding that suitable types amongst the comebacks and crossbreds were somewhat limited, turned her attention to the broader haired merinos of 60s/64s quality, good supplies of which are on offer, in the shape of wools from the south-east of South Australia.

U.S.A. Wool Imports Improving.

Imports of raw wool to U.S.A. during the year 1929 showed an increase over the figures for 1928, and the Department of Commerce has issued the following statistics:—

1928 imports	240,360,000 lb.
1929 imports	277,204,000 lb.

The use of wool in the States shows an increased consumption of roundly 8 per cent. on 1929 figures.

This is pleasing news, and, though we cannot look to that country for the great assistance obtained on our clips some years back, it shows a partial return to favour of wool with the masses, which in itself is satisfactory. The pulse of the movement has been felt, however, by the presence of some serviceable orders by commission operators in our eastern States. Attention has been confined to the better class merinos of good quality, and in conversation with a purchaser recently he stated that, from reports received, a continuance of orders is quite probable, though a strict observance to type is desired.

Increased trade between Russia and Australia is fore-

cast. The five-year plan for reorganisation of industry proposed by the Soviet will, no doubt, result in better trading conditions generally, and once long-term credits are arranged, we can expect further purchases of our raw wool.

Russian purchases show a considerable decline on last year; apart from some activity early in the season there has not been the slightest movement by the Textile Import Co.

It is understood that provision has been made for at least doubling the Soviet's production of textiles by 1933, as compared with 1928. Mills are to be established in the central industrial and Leningrad areas, and it is intended to do the complete job, from scouring to the manufacture of principally underwear and hosiery.

"Made in Australia" Campaign.

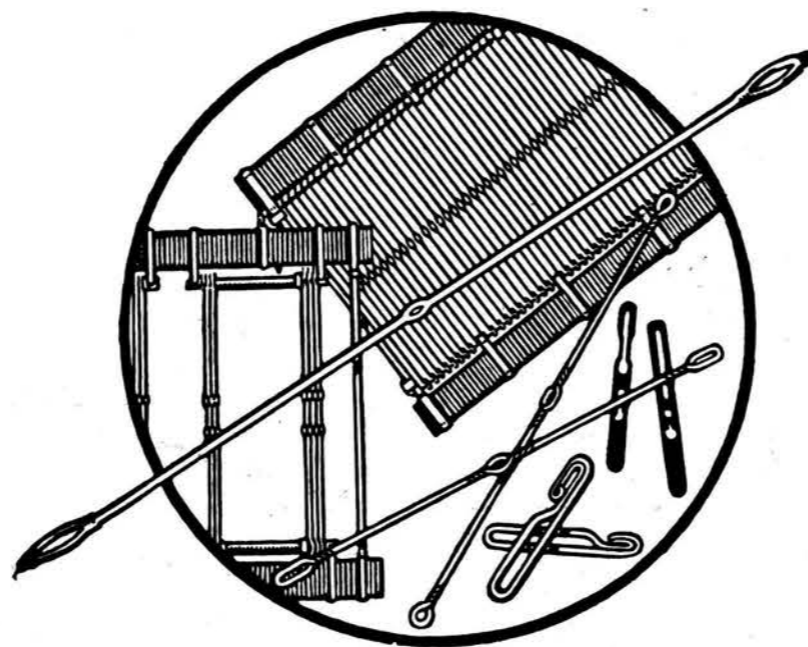
Local mills have shown renewed interest, and fairly substantial purchases have been made of both worsted and woollen types. The approaching winter has developed a demand for blankets, while there is good inquiry for the cheaper class of overcoatings as against the better grade of overgarment last year—a sign of the times apparently.

"Off the peg"—or ready to wear—suitings are gaining in popularity, and tailors may experience a lean winter. Good terms are being offered by the Lane houses in the hope of stimulating trade.

A "Made in Australia" week inaugurated by some of the larger emporiums has resulted in better business following a somewhat dull period, and gradually the

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prejudice against the locally made article is being overcome.

Lambs' Wool Values.

Lambs have still been appearing in heavy quantities, and the short secondary descriptions have been exceptionally difficult of sale. Even those of better length and style appear good buying at the existing level of values, and it is many years since we have seen such reasonable values ruling for this class of staple as a whole.

The numerous star lots of faulty and burry descriptions attract most disappointing bids, and at least one broking house has attempted a pooling of these, with rather satisfactory results.

Washing descriptions are somewhat easier to quit, while speciality lots, though realising intrinsically good comparative values, are not bringing the prices of a month ago. Competition on these specialities is narrowed down to, perhaps, two or three operators, and a combining of interests of late has had a marked effect, values receding 3d. to 4d. per pound. We do think that the grower who cares, and is painstaking in the "get up" of his lambs, is entitled to full consideration from buyers, and prices paid for super to choice descriptions should be commensurate with their value. The production of these is not on a large scale, and should certainly be encouraged. Considering the really choice descriptions, it is doubtful whether the quantity marketed in Australia would exceed 200 bales, practically all of which are grown in Western Victoria, mostly around the Skipton and Ararat districts, while in comebacks and fine crossbreds the limited supply is supplemented by a few nice lines from the larger clips grown in the Upper Murray.

In the case of merinos, the soft, silky texture, quality, length, cleanliness, and freedom from seed or burr, combined with remarkable elasticity which they possess, are the outstanding features, as compared with lambs grown elsewhere in any other Australian State. So far as crossbreds are concerned, somewhat the same characteristics apply, but, during the last few seasons, more attention has been paid to length, which in many instances has taken precedence over quality.

Lambs of these descriptions are used in the high-class wool underwear and flannel trades, milled in the Huddersfield district of England, while the cheaper and heavier grades are employed as assisting agents in the milling of mungo, shoddy, etc., in Spen Valley, of Yorkshire.

In the manufacture, especially in the finishing stages, when the product of lambs rises to the surface of the fabric, the advantage is noticeable by an improved handle.

On the show floors, both in Melbourne and Geelong, a preponderance of 58s quality lambs is noticeable, pointing directly to the fact that growers in future intend to pay more attention to the fat lamb proposition, by gradually changing over to the dual purpose animal. For a number of years now comeback wools of 64s and 60/64s quality have been forward in plenty; originally a large proportion were no better in quality than 56s/58s or 58s/60s, but, by the persistent infusion of fine wool rams, it is now difficult to distinguish them from merinos. To be candid, they are often to be preferred to the straight-haired merinos of nondescript type. It will probably be 1932 before efforts of the change-over are very apparent, but in two years we expect that comeback and crossbred wools

will be of pre-war type, and that the great bulk of wools grouped under such descriptions will revert to 58s/60s quality.

Woolpacks.

A small but, nevertheless, welcome reduction in the costs of production in Australia is the present distributing price of new season's woolpacks, which are quoted at 3/6 per pack in bale lots, as compared with 4/3 in 1928 and 5/6 in 1926. From memory we think the present quotation is the lowest since 1922.

The question of fibre elimination in wool containers is still serious, but, with other problems of greater magnitude confronting the trade at present, experiments for the time being have lapsed. Although encouraging progress reports were given to various parties who have interested themselves in the subject, all seem to reach a dead-end.

Angora Rabbit Wool.

A reader of this journal recently made some inquiries regarding Angora rabbit wool. No doubt, in view of the fact that rabbit farming is being ventured in certain parts of New South Wales, numerous inquiries of a like nature are being prompted, in which case the following information will possibly be of interest:—

Angora rabbit wool, or fur, has in the past been received in two distinct varieties, the English and French, the former being decidedly superior in length of staple and appearance, and finer in quality. So far, its use as a textile is still in the experimental stages, but from all accounts the demand is improving, its outstanding lustre, lightness, warmth, and, above all, its softness of handle, becoming widely recognised amongst the goddesses of fashion. Rather expensive, it has recently been utilised as a blending proposition, being used with wools of anything up to 60s quality, assisting greatly in toning down any harshness in yarns that are required for special purposes.

With its great handle and outstanding softness it could be likened to the superior Western District lambs (of Victoria), the demand for which always enters the speciality class, with prices well above the ordinary.

The average length of staple of the Angora rabbit is favoured around 3 in., and headway is gradually being made by breeders in producing a better class of fibre and larger individual consignments, a drawback in the past being the number of small, unmarketable parcels received.

Like other similar fibres, prices are determined by length, cleanliness, attractiveness and texture. It is largely utilised in glove manufacture, but, as stated above, it is most serviceable and profitable when blended, not only with wool, but associated also with silk and rayon.

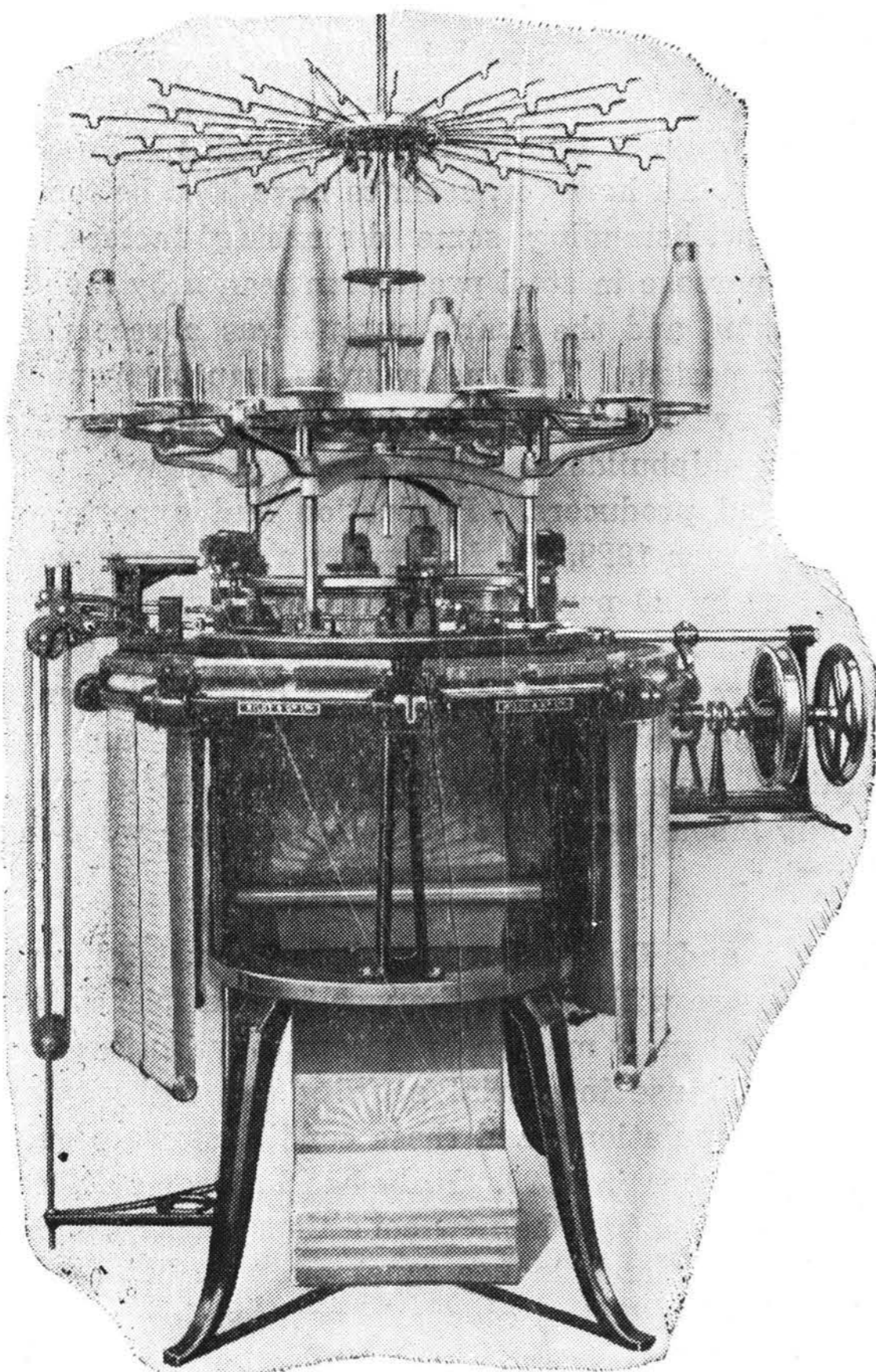
From information gathered, we think we would be correct in stating that the average weight of fur produced from an animal during a period of a year would range from 10 to 14 ounces.

A perusal of many textile journals received from abroad fails to indicate any market quotations, and as yet values appear to be somewhat nominal, though latest advice from a private source indicate a price in the vicinity of 30/ per pound.

Without a doubt, breed, climatic conditions, and herbage
(Continued on page 191.)

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ADELAIDE WORKS
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The Economic Position of Europe: Finance and Industry *

The termination of the Great War was heralded as the dawn of a new and brighter day for Europe. Boundary disputes of long standing were regarded as settled, and the cause of civilisation had been vindicated, no matter what the cost in money and man power. Whether all that was then claimed by statesmen to be in prospect can ever be accomplished still remains to be seen, but it was apparent a year or two after the peace treaties were signed that Europe had to adjust itself to a new set of conditions, political and commercial, of which some had not been foreseen, while others were less satisfactory than had been anticipated. Transportation was disorganised in several countries, and there were serious losses to make up in capital and property. Countries in the Americas and the Orient which, before the war, had been markets for a large part of Europe's vast quantity of industrial goods had been forced during the conflict to manufacture some of their own requirements, and had found many advantages in so doing; the wide market of pre-war days in Eastern Europe was restricted by the tariffs of new States; and, briefly, Western Europe found that it was no longer the world's factory. Violent fluctuations commenced in currencies and prices of commodities. By 1923 Old World trade and finance were practically in a state of demoralisation; most of the attempts to balance national budgets and to check currency inflation had failed, resulting in unstable money, export of capital by the wealthy classes, high interest rates, marked fluctuations in exchanges, and, in some countries (Germany, for example) almost complete suspension of saving on the part of the people. Industrial production had fallen to about two-thirds of pre-war volume, while agricultural production was at least 10 per cent. below normal. Widespread unemployment developed during a period of lessening purchasing power and rising prices.

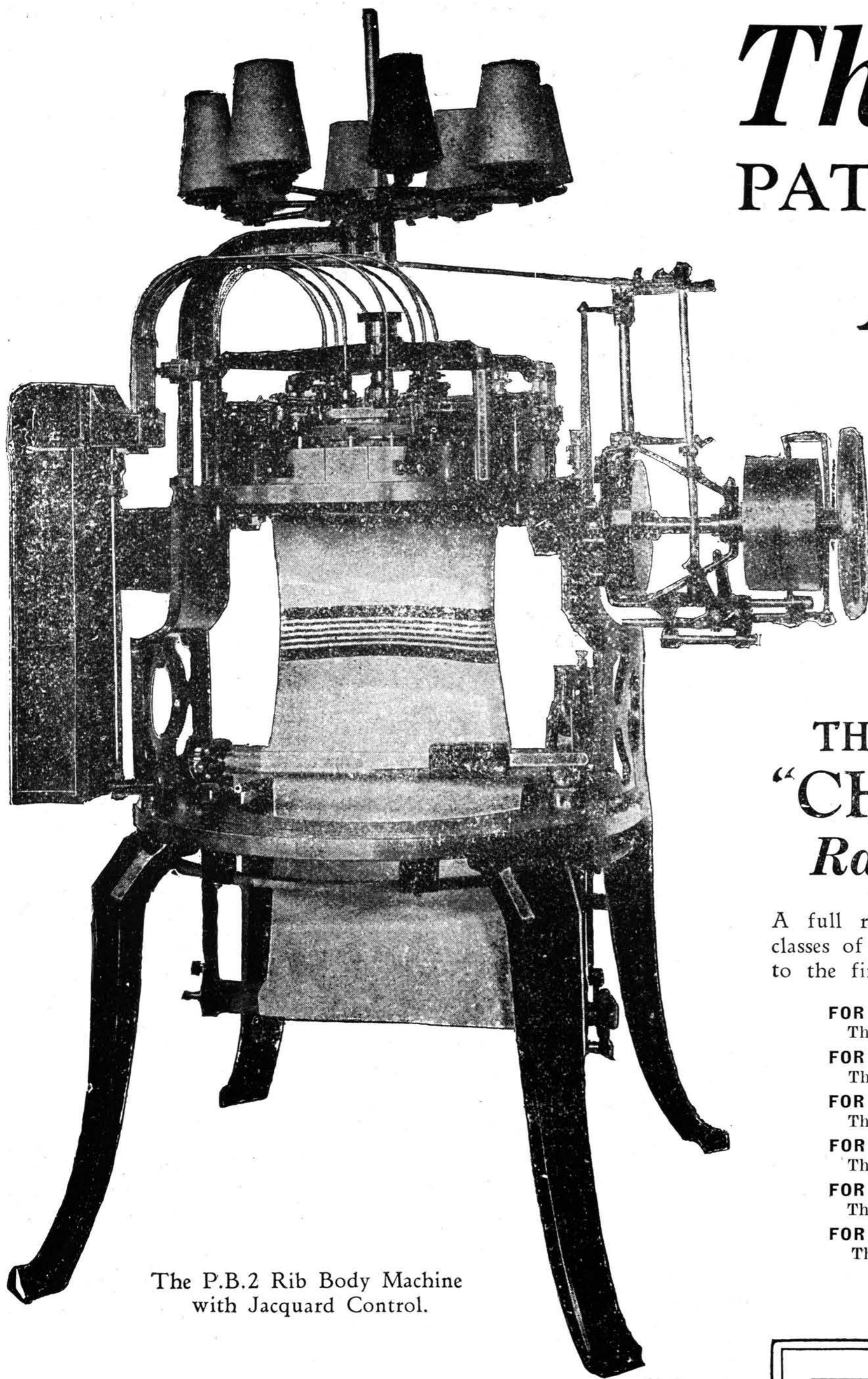
Post-war progress in Europe dates from about the first part of 1924. Some minor countries had undertaken financial reorganisation prior to that year, but as long as the finances of Germany and Great Britain, the two pivotal nations, were on a level markedly inferior to that of the pre-war period permanent order could not be restored in any part of Europe. The Dawes Plan, put into effect late in 1923, aimed at the fiscal stabilisation of Germany; early in 1925 Great Britain re-established the gold standard. On the foundation of these events general improvement has been built, and nearly all the countries have one by one returned to a condition of balanced budgets and of stabilised currencies resting on a gold basis. Capital has been drawn back into production, exchange rates move within a comparatively narrow range, and savings deposits are almost, if not altogether, equal to pre-war volume. During 1929 an acute money stringency

developed as a result of a scramble for gold and the attraction of funds to the United States because of high interest rates, and for the same reason there was a cessation in the flow of capital from the United States, which in former years had been a stimulating influence in a number of European countries. The latter months of 1929 witnessed the return of gold and funds to Europe and easier money conditions on that continent. The full force of these events has apparently not yet been felt, but although European industry has actually lost some of the gains it made, the long-range view is more favourable than in any former post-war year.

Some branches of British industry are in need of further reorganisation to adapt them to present trade conditions, and especially to Continental competition. The general results in 1929, however, seem to have been better than in 1928, notwithstanding some disturbing factors. There was an increase in steel production month by month until the autumn, and the year's output was a record for the post-war period. This noteworthy improvement in one of the "key" industries was due chiefly to a greater demand by shipbuilders and to lessened competition from Continental producers. Production and exports of coal increased over 1928, the former by about 8 per cent., and the latter by 20 per cent. The machinery and electrical equipment industries were fairly active, while the chemical, rayon and leather trades held their own in the face of severe competition. The cotton and woollen operators experienced another disappointing year, and the only labour troubles of any consequence were in these industries.

France and Belgium, which have industrial machines that compare with any in the world for efficiency, and are probably the most modern in Europe, have enjoyed several years of intense industrial activity and full employment for their populations, and these conditions were generally still in evidence in 1929. Italy has had some difficulty in adjusting herself to the new conditions under which European industry and finance must operate, but during the first part of 1929 her economic position improved. Germany, which had a trade boom following the adoption of the Dawes Plan, and experienced some depression in 1928, had a comparatively good year in 1929, although uncertainty as to the new reparations scheme was a handicap. In December there were slightly more unemployed than in Great Britain, and, while there is a progressive trend in industry, and a more hopeful air since reparation payments were revised downward, it seems that the pressure of population is a difficult problem; it is stated that in 1928 over £40,000,000 was spent in unemployment relief. Business conditions were less favourable in Austria, Bulgaria, Hungary, Poland, Roumania and Spain than in 1928, but improved in Czechoslovakia, the Netherlands and Sweden. Russia is engaged in a large plan of industrialism with the object of exceeding the production of pre-war times, but has a long way to go, and must overcome many economic and political difficulties before she is in a stable position.

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World Deflation of Textile Prices

Specially written for this Journal by A. W. Zelomek,
Statistician-Economist, Fairchild Analytical Bureau.

The sharp decline in world wool prices has naturally focussed attention on that commodity. The somewhat similar movement of the other three leading fibres—cotton, silk and rayon—should also be of considerable interest to the leading wool-producing countries. Studies made by the writer over a period of years show a definite relationship between the movement of the various fibres. They show that any one fibre cannot continue to sell at a price out of alignment with the others for any length of time without some interaction.

For example, it has been found that cotton exerts the greatest influence on wool, while rayon exerts the greatest influence on silk. This is logical, in view of the possibility of substitution, when the bargaining power of one of the competing fibres tends to diverge from the others.

The question of the world trend of the four leading fibres, especially during the past decade, or since the post-war depression, is very interesting. It is a fact that the prices of cotton, wool, silk and rayon fluctuate in world markets simultaneously, as a study of prices in any one of the leading consuming countries proves. The writer has, therefore, considered mostly the United States data, because of the available information. At the same time, available data for the United Kingdom were also used.

The price studies completed show that the decline, since the stock market panic in Wall street, and which was of world-wide effect, has been more marked in textiles than in any other group. The Fairchild Composite Fibre Index, which is a weighted aggregate of cotton, wool, silk and rayon prices, declined 17.5 per cent. from the first week in October, 1929, to the last week in February, 1930, while the United States Bureau of Labour Index for wholesale commodities, including about 545 items, declined about 5 per cent. during the same period.

The decline in textile prices during the first two months of 1930 was still more marked, an average of 10 per cent. The decline in the general price level was about 2½ per cent.

The extent of decline of the individual fibres is still more interesting. Cotton prices, based on New York quotations, declined from 18.92 cents per pound for the first week in October, 1929, to 15.16 cents per pound for the last week in February, 1930, or 20 per cent. Eight domestic wool numbers in Boston were 88½ cents per pound during the first week in October and 72½ cents during the last week in February, or a decline of 19 per cent. Eight corresponding foreign wool items in Boston also declined about the same percentage. Raw silk price in New York during the first week in October was \$4.92 per pound, while the last week in February, 1930, it was \$4.22 per pound, or a decline of 15 per cent. Rayon prices, based on 150 denier "A," showed no change during the period. However, several grades actually were reduced.

The recent sharp decline in prices has naturally raised

the question as to whether it is a temporary development or a continuation of a long term trend. The writer has no intention to enter into any discussion as to the world commodity price trend in relation to world gold supply. This subject is controversial, and can be argued on either side.

The fact remains, however, that the current decline, which has been very marked during the past six months, is a continuation of the general trend in the price-level since 1923. The United States Bureau of Labour Wholesale Commodity Index was 103.5 in 1925, declining each year until 96.5, the average for 1929, using 1926 as 100. The Economist Index for the United Kingdom was 160.9 in 1925, and declined to 132.8 for 1929, using 1913 as 100.

The annual decline of textiles in Great Britain from 1924 to 1929 was 23 per cent. The Fairchild Index of textile fibres declined 30 per cent. for the same period.

The Economist Index shows that between the end of 1928 and December 31, 1929, cereals and meat fell by 5.4 per cent., other foods by 7.3 per cent., and textiles by approximately 19 per cent.

The above data are sufficiently indicative of the greater decline in textiles during the sharp deflation in world commodity prices. This even takes into consideration the recent sharp decline in grains, as well as other agricultural raw materials.

The trend of prices shows very clearly that the sharp deflation during the last six months was merely an accelerated movement of a downward trend since 1923, with only one year's interruption in 1928. The trend also suggests that commodity prices may be tending to the pre-war level. In fact, based on data as of March, textiles as a group are only about 12½ per cent. above that level.

It also suggests that the textile group has been the first to be deflated, and that the general price trend level may also be headed in the same direction. Under normal circumstances the trend of raw material prices precedes movements in finished goods, labour costs, etc. Up to the present, while raw material prices were declining, products in which high wages and high cost of manufacture and distributions have played an important part have actually tended upward.

No attempt has been made in this article to discuss in detail the reason or reasons for the declining trend, for that in itself could serve as the basis for one or two articles. The production trend of world raw materials, as well as the available capacity and equipment for industry, shows the extent of expansion and the reasons for pressure on prices. Production of raw materials, as well as available machinery capacity, has exceeded consumption and demand.

The Fairchild Analytical Bureau's recent estimate of world production of cotton, wool, silk and rayon was for a new record total of about 16,907,345,000 pounds, as compared with 16,090,779,000 pounds in 1913. The gain since 1922 has been greater. The total for 1922 was 12,205,346,000 pounds. The increase has probably been as great or greater in wheat, coffee, sugar, rubber, lumber and many other commodities.

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British Textile Review

Specially written for this Journal by Gilbert C. Layton,
Manager of the London "Economist."

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Co-operation in Cotton.

With a revival seemingly as far distant as ever in the British cotton industry, the need for rationalisation and co-operation becomes increasingly imperative. Already good work in this direction has been done by the Lancashire Cotton Corporation. Formed at the beginning of last year, this body has continued steadily to absorb mills, a process necessitating increases of capital from time to time. Recently, in order to take over another five companies, the capital was raised by £309,250 in ordinary, preference and deferred shares, to be allotted to creditors and shareholders. To-day the corporation, with an issued capital of £2,499,196, controls 42 companies, operating in the region of 4,200,000 spindles, and considerable increases in these numbers are pending.

Another step in the same direction was the recent formation of the British Cotton Textile Association, announced by the Joint Committee of Cotton Trade Organisations. Naturally, one of this body's chief aims will be to secure considerable economies by mass production, and to this end will make efforts to increase Lancashire's trade in bulk standard cotton goods. In addition the Association will facilitate and supervise the co-operation of firms in different sections. The scheme, which undoubtedly has considerable merits, aims at setting up a body which will further Lancashire's power to meet the world demand for cheap standard goods by embracing all processes and services from the raw material to the finished article delivered to the consumer. Co-operating with spinners, manufacturers and merchants, this new development should receive support from all sections of the trade, and should do much to revive the future of the leading British export industry.

The Wool Position.

The report made after his investigation into the conditions of the British wool textile industry by Lord Macmillan states that the chief hope of the industry rests in a wages cut of, roughly, 9 per cent., as wages now account for about 32 per cent. of the cost of production from sorting to finished goods at warehouse. This necessity, Lord Macmillan maintains, is brought about by two demands: the vital importance of regaining much of the ground lost in the export trade, and the industry's present inability to pay current wages.

This industry is undoubtedly at present in a serious position and pessimism is rampant, but whether Lord Macmillan's suggestion is the correct one is open to doubt. The crux of the situation lies in the export market. In the domestic market, although demand fails to regain its pre-war level, foreign competition is being relatively successfully combated. Thus, for example, imports of woollen and worsted yarns in 1929 amounted to 20.3 million pounds, against 28.5 million pounds, the average for

1908-1913, and the figures for woollen and worsted tissues were 33.8 million square yards imported in 1929, as against 71.3 million square yards for 1908-13. A striking contrast is, however, presented on the export side. British exports of tops, yarns and all tissues have all decreased in the last six years, while the corresponding totals for five leading Continental producers show considerable increases. Thus, for example, British exports of all tissues fell from 233 million square yards in 1924 to 163 million square yards in 1929, but corresponding Continental exports (of the five producers) rose from 119 million square yards in 1924 to about 130 million square yards in 1929. Such figures give considerable cause for alarm, and success in the future must rest in reduced costs of production. While a wages cut—not necessarily as large as that suggested—would do much to achieve this end, many uphold that there is considerable scope for rationalisation amongst the employers. In an industry where variety of products is essential mass production has its limitations, but a process of rationalisation, entailing the scrapping of inefficient and redundant plant, would achieve economies in many branches, including labour costs. The future will, therefore, largely depend on the extent to which co-operation and amalgamation are practised in all branches of the industry, ranging from the buying of the raw material to the distribution of the finished article.

The Fall in Jute Prices.

The jute industry has not yet had its hopes for the new year justified, and prices continue to follow a downward trend, as is the case with so many other commodities. Naturally the determining factor is the price of the raw material. At the beginning of 1929 some optimism prevailed when this price rose from about £32 per ton in January to nearly £36 in February. From that date, however, there ensued a steady trend downward to just under £26 in December last, only interrupted by a rally, which was not maintained, in August and September. January saw another move downwards to under £24 per ton, and in spite of a mild recovery, prices still remain relatively unstable around £24 per ton.

Strangely enough, this state of affairs cannot be said to be due to overproduction, and would appear to be more of a cyclic nature. It has been estimated, for example, that the 1929 supply of jute, of which Bengal accounts for practically all, amounted to approximately 11,050,000 bales, while world consumption has been placed at 11,350,000 bales. This movement has naturally has its counterpart in prices in industries dependent on jute as their raw material. Thus the price of 100 B. twill bags fell from about 79/6 in January, 1929, to under 62/ in June, recovered to about 70/ in August, and has subsequently declined to less than 58/ in February. Similarly that for 100 yards of 10/40 hessian is now in the region of 25/, compared with about 33/6 in January, 1929. Unfortunately by far the largest producer, Calcutta, has been experiencing rather unsettled times, largely connected with political propaganda, but the whole world over trade appears to have taken a somewhat inexplicably dull turn, and any attempt to forecast the future must inevitably be difficult and speculative.

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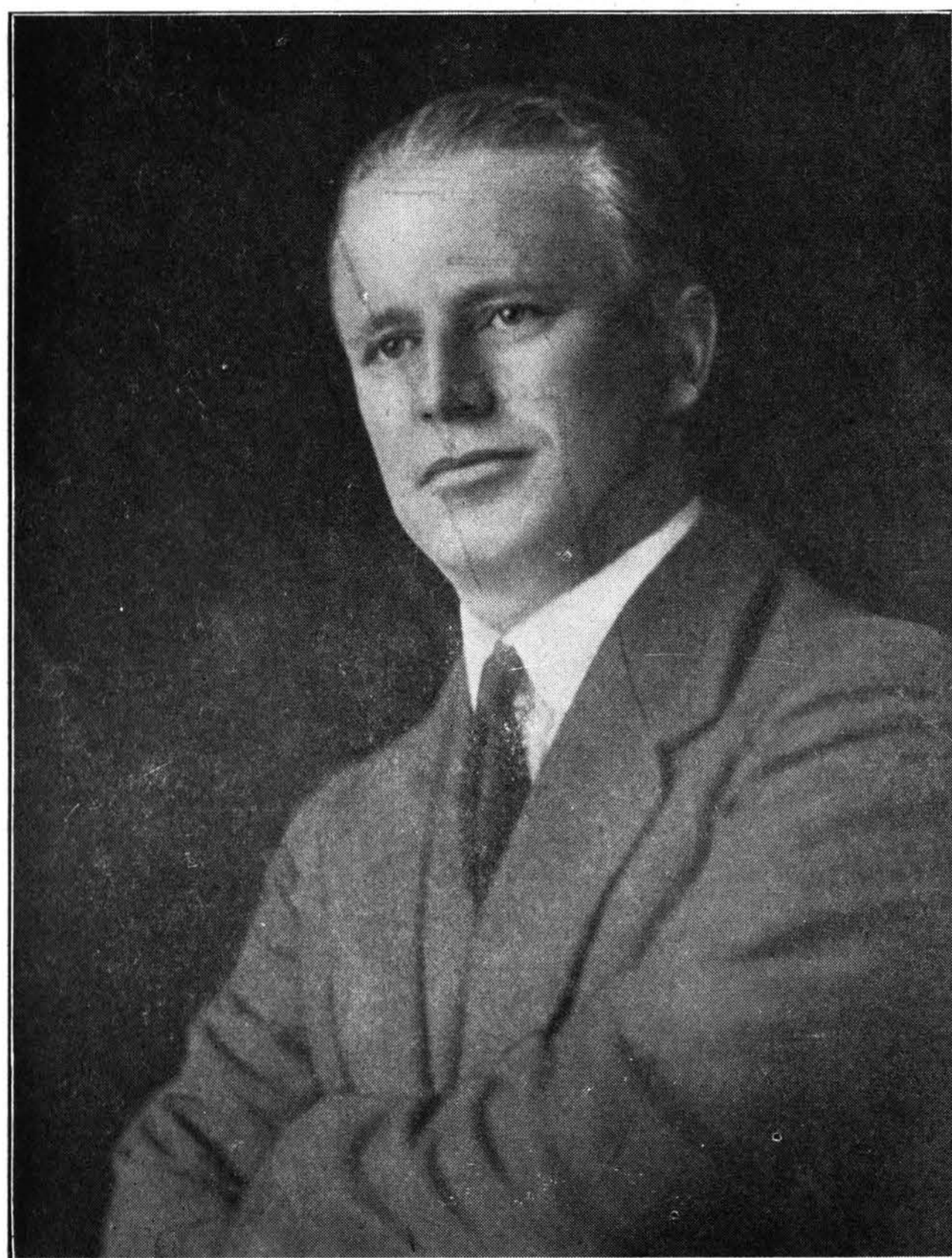


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HOSIERY & KNITTED GOODS MANUFACTURERS' ASSOCIATION of VICTORIA.

Several meetings of the executive were held during the month, and on Monday, May 5, the full-fashioned hosiery manufacturers met and formed a new section of the Association. Mr. A. G. Staley was appointed chairman of the section, and Mr. G. Peacock and Mr. L. R. McFarlane were elected the sections representatives on the executive of the Association.



MR. A. EASTAUGH.

Mr. A. Eastaugh, managing director of Eastaugh Ltd., Richmond, manufacturers of the well-known "Sunny Australia" underwear, has been appointed vice-chairman of the newly-formed Hosiery and Knitted Goods Manufacturers' Association of Victoria. The formation of the various sections of the knitting manufacturing industry of Victoria into one big association has been brought about largely as a result of the work of Mr. Eastaugh, and hearty appreciation of his efforts was expressed at the inaugural meeting of the association on February 20.

Arbitration Award Adjustment Committee.

A meeting of the Knitters' Arbitration Award Adjustment Committee was held at the Victorian Chamber of

Manufacturers' rooms on May 1. Messrs. Abrahams, O'Callaghan and Peacock represented the employers, and Messrs. Farnworth, Loft and O'Donnell the employees. Mr. R. O. Snape acted as chairman and secretary. The following cases were dealt with:—

(1) Claim by an employee for a week's wages in lieu of notice. The manufacturer concerned stated that this employee had been dismissed without notice for misconduct, and paid only to date of dismissal, owing to the fact that he had stamped another employee's time-card and used insolent words to the foreman. The claimant admitted having stamped another man's card. After hearing evidence from several witnesses the committee decided in favour of the manufacturer.

(2) Claim by a female employee for two days' pay in lieu of notice. The employer stated that the girl was dismissed for malingering and inefficiency. The claimant appeared before the committee and gave evidence, denying the charges. The committee decided that the employee was entitled to two days' pay.

(3) Claim by twenty-four female employees against a manufacturer for holiday pay for Christmas Day and Boxing Day. The committee decided that these employees were entitled to the amount claimed by them, provided their claims had been submitted to the employer in writing in accordance with the terms of the award.

(4) Application for a ruling as to the marginal rate payable to male employees operating drying boxes and automatic boarding machines in hosiery mills. After some discussion the application was adjourned to enable members of the committee to inspect the machines.

Typographical Error in Knitters' Awards.

A typographical error occurs in clause 26 of the official copies of the knitters' arbitration awards. In classification 6 (adult females) the apostrophe after the word "machinists" should be a comma.

DUTY ON WOOL TOPS.

An inquiry in regard to the duty on wool tops was opened by the Tariff Board in Sydney on April 1.

The chairman of the Board (Mr. H. McConaghy) stated that, under the proposals introduced by Parliament on December 11, 1929, an item was inserted making wool tops dutiable at the rate of 9d. per lb. and 20 per cent. ad valorem. Mr. F. W. Hughes, chairman and managing director of F. W. Hughes Pty. Ltd., Alexandria Spinning Mills Ltd. and subsidiary pastoral and meat companies, gave evidence in favour of the duty. Mr. Hughes said that he was not appearing merely as an applicant in his company's own interests as manufacturers of wool tops, but more as a pastoralist than a manufacturer of tops in this case. He did not anticipate receiving any benefit from the duty as a top manufacturer, but desired to submit that, from an Australian point of view, a sufficient duty on wool tops imported into Australia was very necessary. The amount of wool and wool tops imported in the year 1927-28 was the equivalent of 13,776,534 lb. of greasy wool, and in 1928-29 the equivalent of 7,297,010 lb.; that supplanted Australian-grown wool or Australian-made tops in the manufacture of ap-

parel for Australians. That such a state of things should have been permitted seemed almost incredible. The wool came mainly from New Zealand and the tops mainly from Great Britain. In his opinion six months' notice should be given to New Zealand of any intention to impose a duty on wool from that and all other countries. As far as could be ascertained, the wool imported was mainly very coarse—coarse and medium crossbred. The stoppage of these wool imports would create a much better market for the Commonwealth production of these qualities. There was undoubtedly now developing an appreciable swing away from merino and to the production of crossbred lambs, particularly in New South Wales, with the hope of replacing lost income from wool with revenue from an increased frozen lamb export trade. There was an abnormal banking up in most overseas wool-using countries of stocks of crossbred wool and tops, and a poor outlook for crossbred wool as a consequence. This banking up was greater in the case of crossbred than in the case of merino. As the Commonwealth's present production of coarse and medium crossbred probably did not exceed 200,000 bales out of a total of about 450,000 of all kinds of crossbred, it could be seen that if an additional purchasing power was made available exclusively in Australian markets for from 20,000 to 30,000 bales, it would be a source of added strength to the market. As far as imported tops were concerned, it was practically certain that any crossbred imported had been made from wool grown in the Argentine, New Zealand, Great Britain, or in any other country than Australia. As to the merino tops imported, Australian wool may have been sent abroad, combed, and returned in the shape of tops; but, on the other hand, there was a strong probability that these tops were made from South African wool, or South African wool blended with Australian. It seemed strange that Australia should be exporting and importing the same commodity. Mr. Hughes submitted figures showing the considerable falling off in the export of wool tops from Australia in recent years. Continuing, Mr. Hughes said that the U.S.A. market was closed in 1922 by a high tariff duty, and exports to Japan had practically ceased owing to the duty imposed by that country in 1926. Any suggestion that tops could not be made in Australia of any required quality suitable for all Australian requirements could be regarded merely as an attempt to throw dust in the eyes of the recipient of the suggestion. (Samples of pure merino tops of very high spinning quality were submitted to the Board by Mr. Hughes.) Mr. Hughes added that he considered the duty of 9d. per lb. and 20 per cent. ad valorem imposed in December last a proper one in the circumstances. The duty in U.S.A. was 17d. per lb. and 20 per cent. ad valorem, and consideration by Congress was now being given to increasing that rate. After a number of questions asked by members of the Board had been answered by Mr. Hughes the inquiry was adjourned to Melbourne on April 14.

Mr. Alfred Eastaugh, managing director of Eastaugh Ltd., Stewart street, Richmond, was the first Melbourne witness. Mr. Eastaugh said that his mills, since their inception, had always used Australian-made wool tops, made from Australian wool, from which they had obtained

satisfaction. While strongly supporting the new duty, he stated that no individual spinner should be permitted to land tops duty free, as was done in a recent instance which he cited.

Mr. W. Stanley, managing director and general manager of the Port Phillip Mills Pty. Ltd., Footscray, who stated that his was the only company in Australia operating entirely as wool top makers, also gave evidence in support of the duty. He employed 90 hands continuously, but prior to the imposition of the duty was only able to maintain an average of 50 hands. The successful operations of his company might be said to depend almost entirely upon the retention of the new duty. For a great many years his company was the second largest exporter of wool tops from Australia to Japan, but their export trade with that country was now practically nil, Japan having imposed a duty and commenced manufacturing her own requirements. Had the imports of wool tops into Australia during the years 1927-28 and 1928-29 been manufactured here, it would have meant an additional disbursement of wages in Australia to the extent of at least £32,000, the purchase of materials in Australia, apart from wool, of at least £21,000, and the purchase of Australian wool to the value of approximately £400,000. In Bradford the trade was sectionalised. A number of firms operated solely as topmakers, others operated as spinners, knitters, weavers, dyers and finishers—all separate units and separate mills, specialising in all the various processes of hosiery and cloth makers. Already there were very definite indications that the Australian worsted trade here was being sectionalised. The separate units of the worsted trade were increasing in Australia. He knew of at least three additional spinning plants in course of erection which were not providing for their own combing plants. The Port Phillip Mills were specialists in the manufacture of wool tops, manufacturing all qualities of tops from fine Botany counts to the coarsest of crossbreds (Lincoln counts) for the worsted trade in Victoria and New South Wales, and were able at the present time to execute all orders without delay. They held substantial stocks, ranging from fine Botany to strong crossbreds, in order that they might be able to supply their clients with a well matured top. From tops manufactured solely from Australian wool the Australian spinners were, in his opinion, producing yarns to-day comparable to yarns produced in any other part of the world. To enable his company to function successfully as topmakers and render efficient service to the Australian spinners, it was necessary for their plant to be run continuously and not spasmodically, as would be the case if the business was subject to the importation of wool tops from overseas. Continuity of production was most essential. It would enable them to decrease their production costs and pass the benefits on to the spinners. Mr. Stanley stated, in conclusion, that in his opinion tariff protection of 9d. per lb., plus 20 per cent. ad valorem, was amply justified on the grounds of public policy alone, it being essential that in the manufacture of our woollens and worsteds nothing but Australian-grown wool be used. This result could only be assured by placing an adequate duty on imported wool tops.

The Carbonising of Coloured Fabrics

Specially written for this Journal by John Nelson.

There are many mills throughout Australasia that do not possess a carbonising plant for the eradication of burr in wool. Consequently the fabrics are often affected to the extent of having to be burred in finishing, which is a costly undertaking, especially if the pieces contain much burr. The main purpose of the writer is to try and enlighten the average fuller how best to overcome a difficult problem encountered in everyday practice. I have no doubt this article will receive a good deal of criticism, but I have personally conducted the following method for a period of years. We are often called upon to use initiative in dealing with fabrics that contain very loose dyes, used in designs with white grounds, such as blazer cloths, etc., or cloths with coloured stripes. These offer a problem in the scouring, as tinting of the white portion must be avoided. It is essential to eliminate this tinting of the white grounds in the scouring and subsequent carbonising, and to free the fabric of vegetable matter.

Before adopting the writer's method it is advisable to treat one piece first until confidence, which will give the future mastery when dealing with a difficult and delicate problem of this kind, is gained. When receiving a fabric of the foregoing type it is first of all necessary to insert the web in the washer, and run in cold water for a short period until the piece is thoroughly wetted out. Now apply to bath of washer two or three pails of good, strong, neutral soap, and run for a period of a quarter of an hour; then wash off with cold water, and repeat the operation. If the pieces are found to be thoroughly clean on testing by hand, another washing off takes place with cold water, until the fabric is entirely devoid of soap lye. We have now arrived at the stage when the piece can be carbonised previous to milling, and a little observation will show "that the white portions are entirely clear of any form of tinting."

Before explaining the portion on carbonising, I would like to mention the fact that it is most essential for the oil used in this class of goods to be easily saponifiable and the water of soft quality. On no account must soda, or any other alkali, be used in the scouring, for, if the oil used in the batches is easily emulsified, strong soap will be found quite sufficient to cleanse the fabric. There is no greater enemy to colour than an indiscriminate use of soda, especially if the dyes be prepared and have a tendency to looseness. I do not advocate that alkali should not be used at all, but it is necessary to know how and when to apply it.

When the fabric has been thoroughly washed off with cold water, the method of carbonising in relation to the avoidance of tinting in the web should be noted. First of all, gather the piece in folds on the side of washer; then place in bath of sufficient cold water to immerse it thoroughly. Now apply to water, H_2SO_4 , enough to give a Twaddle reading of $6\frac{1}{2}$ degrees, after which the fabric is immersed and the machine immediately set in motion.

The fabric must not remain in the acid bath more than 15 minutes, when extracting and tentering follows. A period of half an hour will be found sufficient for drying and baking, providing the temperature is 170 deg. Fahr. Crushing of the burr afterwards takes place in the milling machine, the vegetable matter returning to its original constituent—carbon.

We now come to the most important part of the whole process—that is, the neutralising. Again, place the fabric in washer, and run in cold water for a period, taking care that enough water is allowed to stay in the bath to receive the neutraliser. Now place into a pail two pints of ammonia, and let the same down with cold water, then apply very slowly. It is essential, when applying any kind of lyes, to pour them through a trough at the back of the washer. If this is done, the lyes go down into the bath itself without striking the pieces. The ammonia must on no account be allowed to operate more than eight minutes, as during that period neutralisation will have taken effect. The pieces must now receive a good washing off with cold water and afterwards soaping. The fabric is now ready for extracting, and milling should follow by the gradual application of cool soap. The extent of fulling that is needed on a blazer cloth of the general sports type is 6 per cent. of the entire yardage of the web. This ratio will be found to give sufficient "handle" in the finished goods.

When milling is completed wash off with cold water, then extract, and tenter as quickly as possible. Do not allow the piece to lie about wet, for by so doing the colours are apt to bleed. It is far better to keep them on the move all the time until they are dry.

There are times when it is not convenient for a dyer to be in possession of dyes that give positive fastness. A working to shade must be his first consideration, and it often happens that this is gained without due regard to fastness. Many dyers have difficulty with colours such as cherry, scarlet, red, etc., in trying to obtain fastness to scouring and milling. I consider it a most essential adjunct to dyeing that a knowledge of scouring and fulling should be acquired by every dyer to enable him to ascertain whether his dyeings are receiving the correct treatment at the hands of those in charge of the scouring and fulling. In piece dyeing care should be taken that fabrics do not come into contact with substances such as alum, sugar of lead, etc., previous to dyeing. Carelessness is often displayed in this respect while in the millhouse, with the result that the dyer fails to obtain penetration of the dyeware, so essential to evenness of shade. I do not know of any means of neutralising the above substances once they have been allowed to permeate a fabric. I do not intend to defend the dyer at the expense of the scourer, but, speaking from practical experience, most loose colours, if given reasonable care, and the avoidance of alkalis, can be so humoured that they cease to be troublesome after the first scour. Superfluous residue from dyeware is always more or less present, but to know, and understand, the difference between the action of forced bleeding and the more common residue is most important.

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Decreased Cloth Exports to Australia

A New Style in Woollen Tweeds

From Our Bradford Correspondent

We have just received a copy of the United Kingdom Board of Trade returns for February, and, after turning up the record of our exports of woollen and worsted fabrics to Australia and other British colonies have been tempted to compare these figures with others of, say, ten years ago and before the war. We have been restrained, however, by the reflection that comparisons of this kind do not accomplish anything practical. Certainly quite enough of it has been done, and for the present it will suffice to confine it to the scope which the last issue of the Board of Trade returns permits—January-February of the current and two preceding years. Our total exports of woollen fabrics during the first two months of this year amounted to 18,577,500 square yards, compared with 22,414,000 square yards in the same period of 1929 and 24,613,400 square yards in 1928. Our exports of worsted fabrics totalled 8,561,300 square yards, compared with 10,737,200 square yards in the first two months of 1929 and 6,763,400 square yards in the same period of 1928. The quantities of goods exported to Australia and other British Dominions were as follows:—

	January-February.		
	1928.	1929.	1930.
Woollen Fabrics.	Sq. Yds.	Sq. Yds.	Sq. Yds.
South Africa	958,900	891,900	689,200
India	847,200	255,700	287,400
Australia	2,657,900	1,816,800	1,350,400
New Zealand	634,400	633,300	524,000
Canada	2,945,800	2,999,300	1,999,000
Worsted Fabrics.			
South Africa	203,800	211,100	158,200
India	152,600	169,800	190,300
Australia	427,600	400,400	343,500
New Zealand	153,500	207,000	198,900
Canada	1,298,000	2,646,700	1,775,300

Attention is particularly directed to the decrease in exports to Australia, and there seems to be every prospect of less business being done in wool textile goods between that country and the West Riding of Yorkshire. Only in specialities will our manufacturers be able to command the patronage of export merchants or do much trade themselves. The reduction in the purchasing power of the public in Australia is certain to have some effect, even upon the wealthier part of the community, but the guillotine has fallen on what are called here "cloths for the million." The imposition of high duties in Australia is not regarded with approval here, particularly as huge sums of money have been borrowed. No doubt the Australian Government is entitled to adopt any policy calculated to promote the prosperity of the country, but manufacturers here, who can well do with increased demands

for their goods, see very little prospect of finding better outlets in Australia.

Certain developments in the manufacture of ladies' dressgoods in the West Riding deserve to be noted by Australian manufacturers. Many of them will know Yeadon and Guiseley, two small towns about five miles from Bradford in the Wharfedale district. Both have long been engaged in the manufacture of women's fabrics. Forty years ago Guiseley tweeds were popular throughout England, the big woollen manufacturing concerns being developed by the sale of these goods. They are really single Prunelle twills, woven on three shafts. Prior to the advent of the power loom these tweeds were made on the hand loom in the homes of the people. Six weeks ago all the mills in these two places were very slack, but the development of a demand for "knicker" or "snowflake" woollen tweeds for women's wear has made them very busy. These goods are shown in the costume by one of the large retail stores in Bradford. The fabrics are very attractive in appearance, and there is a considerable variety of shade and design, but they are all made on the same principle. Some of the mills are so busy that they are putting out part of their work on commission to mills in Calverley and Rodley, situated on the opposite side of the River Aire. How long this activity in Guiseley and Yeadon will continue is difficult to say, but no doubt the goods will find their way to other countries, and if they please the public there, as they are practically certain to do, additional orders will be forthcoming.

There is nothing difficult about the production of the yarns for these tweed cloths. They are very similar to the Donegal tweeds, which were very popular during the war, though they are not so heavy. The special feature of the tweeds now being made is that they are woven from woollen "knop" yarns, these enabling the snowflake effect to be produced. Little bits of wool about the size of a snowflake are dropped in during the last condensing operation, before the sliver goes on to the mule bobbin. The effect may be obtained by using carbonised shoddy and burrs. The woollen yarns used are probably ten to twelve skeins, and contain just enough twist to make them weavable. They should not on any account be hard twisted, the essential feature of these fabrics being their soft handle, and for an Australian climate need not be more than ten to twelve ounces in weight.

The losses incurred by the big artificial silk firms should warn Australian manufacturers not to go in for the manufacture of this article. The British Enka Artificial Silk Company shows a loss of £239,600, and other companies are in an equally unsatisfactory position. If a big firm like Courtaulds can only carry on with a reduction in its last annual profit of nearly £1,500,000, it is quite evident

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what is happening in the industry generally. Many wholesale buyers of manufactured goods in this country think that artificial silk fabrics have had their day. They look very nice when new, but are deficient in wearing capacity. The handle and appearance of artificial silk stockings fascinated feminine wearers, but they do not stand the test of washing like wool, and their deficiency in providing warmth has also been revealed. With regard to the latter, the difficulty has been overcome by providing thin Botany hose to wear under the silk, but this means putting on two pairs of stockings instead of one.

Several men's and women's wear cloths made in the United States are on show at the Bradford Chamber of Commerce this week. They include a few made in France, but, though intended to be representative of what is selling best in the States, include nothing which equals in style, colour or value the dressgoods made here. There is a nice nine-ounce covert coating in green and other colours. The mill price is 10/3½ per yard, 54 inches wide. Another cloth is a blue and white tweed, made in 15 ounces weight, the price being 17/6½ per yard, 54 inches wide. The men's fabrics are the usual fancy tweeds, mostly worsteds, with cotton and artificial silk stripes. Among the French cloths is an overcoating weighing 38 to 40 ounces to the yard, 56 inches wide, the price being 49/, landed United States port. It is not as attractive as one made in America at 23/9 per yard, and weighing about 33 ounces, 56 inches wide. Our very best cloths are being taken by America irrespective of prices. One or two Huddersfield manufacturers buy two-fold yarns spun from the very finest Tasmanian and Victorian merino wool for dress suitings for evening wear, made up in the West End of London. Scottish manufacturers export the very best of their productions, but nothing can be done in ordinary goods so long as the present high import duties remain. Some retail clothiers in the States are making a speciality of cloths made in England, but nearly every mill has a designer or manager hailing from either England or Scotland.

JUTE FUTURES MARKET FOR LONDON.

"The time has surely now come for the various trade organisations in London not only to revise rules and regulations, and to adopt some sort of method, but to see that the enormous risk which is at present carried on by various brokers and merchants who deal in jute is limited to a minimum, and this can only be done by adopting the policy at present in force in the cotton, sugar, coffee, metal, silk and other trades," states "Commerce," a Calcutta journal. "It would be better to provide in London the facilities of a well-organised 'futures' market in jute; for, after all, what else except a contract and arbitration does London provide in this respect at the present moment?"

Dundee manufacturers are disposed to regard their troubles as incidental to the generally disturbed conditions of industry, and the suggestion which has again been made for the establishment in London of a futures market for the trade does not impress them. A prominent member of the jute trade said recently that, while it would probably not affect Dundee one way or the other, he did not think that the project would be regarded favourably.

To the Woodshed at Forty-Five

"No man's knowledge, here, can go beyond his experience."—John Locke.

In the olden days when moral persuasion was accompanied by physical chastisement, the woodshed was the usual rendezvous for father and sonny when the latter had wandered from the set road of propriety laid out by the former.

There always came a time, however, when father, appreciative of his son's physical ability to take care of himself, ceased his woodshed conferences, and allowed his son to assume a sitting attitude without inconvenience.

It is to be noted that this period of cessation upon the part of the paternal ancestor was determined by the increased ability of his offspring and not by his age.

Some of the modern Czars of Commerce, forgetful of the reasons for their discontinuance of earlier visits to the woodshed, have formulated rules the reverse of those which relieved them of their youthful suffering.

A number of business organisations have decided that they will not employ anyone who has passed the age of forty-five, thus designating a specific age as a determination of a man's ability.

They have decided to take every man who has reached the age of forty-five into the woodshed, give him a thorough spanking, and send him to bed for ever.

As to how these commercially chastised men are to obtain the necessities of life is of no import to those who punish.

The world is full of revolutionary ideas, but no one of them possesses the possibility of greater disaster than this arbitrary fixation of ability based upon age.

"Our knowledge is the massed thought and experience of innumerable minds."—Emerson.

A man's ability is based solely upon experience—practical experience and knowledge gained from observation.

Has a man lost his ability to absorb knowledge at the age of forty-five?

A man's brain is not an inanimate sponge capable of complete saturation. It is always possible for it to absorb information and to assimilate it.

The value of a man is dependent upon his ability to weave the new into the old to produce a new result.

"What is all knowledge but recorded experience?"—Carlyle.

All knowledge is based upon what has gone before, and to assert that a man has reached his acme of capabilities at a definite age is to argue that he knows all that is to be known.

A man at twenty-five knows little, and is incapable of making the best practical use of that which he knows.

Experience and knowledge walk hand in hand, and the latter is a commercial weakling unless supported by the former.

The man at forty-five has had little real practical experience. He has just begun to correlate the facts which he has accumulated, and to place them in proper relationship to each other. He has been gathering the materials for the edifice of his success. He has been a

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planner and a dreamer. Life is just beginning to be real and serious to him. His work is ahead of him.

The man at fifty regrets his short-sightedness and inability at forty-five, as does the man of sixty his inability at fifty-five.

Added responsibilities bring an appreciation of the necessity of real work, and real work is based upon the requirements of those responsibilities.

The young man locks his business thoughts in his desk at closing time. His efforts are limited to his working hours. His youthful enthusiasm leads him into the by-ways of pleasure and personal gratification.

"The tree of knowledge is not that of life."—Byron.

The man of forty-five, appreciating the seriousness of business, and its necessity to his existence, carries it with him during all of his waking hours. His office is with him always. There is no definite decisive dividing line between business and pleasure. They are so interwoven as to be inseparable.

The theory of an age limit to usefulness is as illogical as the actions of those who would put it into practice.

Probably every director, officer and manager of these corporations who have assumed the knowledge of Providence is himself far beyond the age limit which he sets up, but there is no record of any of these individuals resigning from their lucrative positions because of that fact.

As soon as a Board of Directors adopts a resolution to the effect that in the future it will employ no one over the age of forty-five, because that age is convincing evidence of inefficiency, each director over that age should immediately resign, because he of his own admission is a useless member of the organisation. That, of course, would be the proper action, but it just simply is not being done.

Bill Smith, a director, so puffed up with his own self importance that his swollen cheeks have closed his eyes until he can see nothing except the end of his own nose, tells fifty-year-old Jim Brown that his age proves that he is a useless member of society, a hanger-on impeding the wheels of progress and not worthy of consideration as either a worker or as an essential human being, and Jim, remembering that Bill is sixty, raises his voice in condemnation of a system that allows men of the mentality of Bill to occupy positions of responsibility—and Jim is correct.—"Textile Colorist."

NEW HOSE MACHINE.

New Toe Mechanism on Model K. Plain and Spiral Hose Machine.

A new Model K and plain and spiral hose machine for the making of a new toe is now being offered the trade, by Scott and Williams, Inc. The special features are the elongation of the narrowings of about 25 per cent. over the narrowings of the older or regular type toe. This feature narrows the toe so that there is less material or bulk at the end of the toe, making a perfect fitting toe that conforms to the natural shape of the foot. The surplus of material that is now in the ordinary seamless toe is eliminated.

To avoid the toe portion of the stocking from being exposed beyond the vamp of a particularly low cut shoe, the machine is arranged to knit the upper portion of the toe with the same yarn as is used in the instep, thus permitting the use of a different or heavier yarn for the end portion of the toe to reach back well to the ball of the foot where the wear is the hardest.

The looping or seaming for closing the toe on this stocking is placed underneath instead of on the top or the instep portion of the stocking.

Part way along the narrowings and in between the narrowing and widening for the formation of the toe a gusset has been knit, which beautifies the stocking and does away with the unsightly lumps or so-called dog ears at the beginning and ending of the narrowings which have been so objectionable in the past.

The machine is being offered in gauges as fine as 340 needles, $3\frac{1}{2}$ in. diameter. The Australian agents for Messrs. Scott and Williams, Inc., are Vance and McKee, of Sydney and Melbourne.

DECLINE IN WOOL IMPORTS.

The development of trade in certain small countries is apt to be obscured by more striking developments in other centres (states the "Rayon Record") is certainly the case with Burma, whose trade figures are usually grouped with the figures for India. According to details given by the customs authorities at Rangoon, however, the imports of rayon goods are expanding at the expense of wool. It is interesting to note that this is particularly the position with Japan, while Great Britain, too, is suffering from the decline in wool imports.

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Knitted Outerwear

*Specially written for this Journal by
William Davis, M.A.*

The trade in knitted outerwear now comprises a large range of different articles, which season by season make an increasing appeal to the wearer, and manufacturers find that when their market in undergarments is saturated, they have a further field of development in the provision of knitted outer garments which now feature in the wardrobe of most members of the public. There are many ramifications of this branch, and it is found that a manufacturer moves from one grade to another according to his success. In the lowest class as regards price are those articles cut out of knitted stockinette made on one or other of the circular knitting machines referred to in a previous article. The next stage is to produce those articles with certain items such as the collars fully fashioned to shape, while another step is in the direction of producing them on machines, such as flat knitters, where all parts of the article can be made exactly to size on the machine, and this branch includes childrens' garments where small pieces have to be made which do not always adapt themselves to the methods of mass production.

At the present time a very flourishing branch of outer wear is the striped fabric where the only addition to plain knitting are a few extra thread guides to carry additional striping colours. In the circular machine, this is met, of course, by placing the threads in colour order in the repeat of the feeders, but this has only a small scope, for all the colour schemes have to come into a repeat of eight or twelve. In other machines are arrangements for making stripes in any width, the old colour being changed and automatically replaced by another, according to a colour chain. These are cross striped fabrics, but they can be altered and varied considerably in making up. In the case of pearl stitch fabrics, these can be knitted in cross stripes, and the fabric turned round at right angles, which is the way in which this fabric is nearly always worn. This type of stitch is admirably adapted to the above method, for in this variety the stretch is in the direction of the length when it is knitted, and by turning it on its side this stretch occurs in the width where it is most useful, also the cross stripes are thereby changed to the more useful vertical style. In plain stockinette, however, those stripes can be given a turn in the garment by a process of rucknig, that is the fabric is drawn together by a sewing stitch so that the cross stripes are made to run at an angle in the fabric, and a very suitable place for this to occur is at the shoulder, where a drawing in of the fabric is often desirable in any case to give a better shape. But this striped fabric is also being made up bodily and wholly at an angle of about 45 degrees, so that the entire striped effect occurs at an angle. If the stripes are varied in size, for example, the top portion can be made up of

broad stripes, followed by a series of narrow stripes at the centre, finishing up again by a row of the bolder and broader stripes. These diagonally striped effects are extremely popular, and they give a new and striking appearance to the garment. In plain garments the same idea can be carried out in the strapping, which is generally attached down the front, around the bottom, and at pockets and cuffs to hide the frayed and cut edge of the garment. This strapping is produced in two colours to match the ground, in two and two, or four and four colour arrangements. It is usual to attach this with the stripes running straight across, but it is very attractive and novel to attach these at an angle so that they have a twilled bias towards the right.

The next stage in this branch of outerwear manufacture is the appliqued style of ornament where pieces of cut fabric are attached to the ground in the form of designs and figures. There are usually several colours of stockinette available, and the changes are run on those to produce designs on the garments. One drawback is the difficulty experienced in getting those segments on to the garment neatly, for the cut edge of knitted material shows a tendency to fray with a slight friction, and this makes the design appear untidy. One method is to attach the pieces with a bold chain stitch in colour so that the frayed edge is entirely hidden. If the plain lockstitch is used, it has to be applied a little way from the edge to get a grip so that a piece stands out from it. When the piece is felled in this way with the chain stitch, then the attachment is much neater. Another device being adopted at present is to attach the appliques in the ordinary manner, but to have a lining of gold or tinsel thread round it; this takes the eye away from the junction of the two materials, and improves the appearance of the garment. One objection to such tinsel is, however, that it soon tarnishes, and if the goods do not find a ready sale and have to remain in stock for a time, it becomes discoloured. Of course, real gold or silver is available which will keep its colour.

It is an advantage if the appliqued fabric is made out of firm felted cloth, which is much more stable than ordinary stockinette, and when this is attached it gives a much neater and firmer appearance, the design holding its position indefinitely without any ragging of the edge. In the floral effects, showing sprays of leaf or flower at present in request, a whole array of floral style after the manner of a garland is cut in this way out of the firm felted fabric. In some patterns the edges of the design pieces are not tacked down, but are attached at the centre so that the pieces erect themselves on the surface in bold relief. For example, the device is attached along the centre, and the leaves and petals stand out from the ground fabric in a most realistic manner. In some

examples, also, the figure of an animal is attached to the garment, such as a squirrel whose tail is developed in coloured ribbon only lightly held in place by the stitching, giving a more artistic effect.

In such goods economy in the use of the materials is urged, and is indeed indispensable to success, for if the pieces attached become too elaborate then the labour costs involved are too high to compete, for the article then impinges on a higher grade of garment made on the jacquard or full-fashioned system. Circles of various sizes can be cut out with a template or dies; these can next be bisected and trimmed to form moons, a semi-circle can appear as a hat on a figure, squares can be used, and when cut across produce triangles, all of which schemes are highly suitable to such good. It means then the manufacturer can prepare those segments rapidly, and by combining them to produce the utmost effectiveness, can secure a wide range of new styles. Ideas for such goods abound everywhere. The writer has just seen a range of goods based on the simple rustic scenes found on Christmas cards. For the schemes of the crest order, many rich ideas can be gathered from the Chinese and Japanese alphabets, or from Turkish and Persian rugs. Wall papers at present are also very useful for suggestions of floral effects, fragments being taken from a larger scheme and adapted.

The bathing costume trade is one which lends itself to treatment in appliqued styles, and recent seasons have shown a surprising development of this branch. It received its stimulus from changed ideas of bathing dress, for the ensemble has now blossomed out under the title of beach wear, and instead of wearers hurrying into the water and out again almost furtively, they repose on the sands, allowing the rays of the sun to exert health-giving power. The appliqued patterns are all in keeping with marine subjects, gulls, yachts, wavy ground effects as the basis, are all standard form. In place of the isolated fish or bird, however, these styles are now being made with more life, and these forms appear in groups, such as a row of gulls giving the impression of a flock in flight in the distance, the ground of the article also shows a shoal of flying fish cunningly devised, shells are useful items, and in some examples the mermaid style is cleverly developed by rows of curved shapes in gradually shading blue tones. In some cases a row of balloons is boldly portrayed on the front, in others a very large flower, and in others a form of fish or marine subject portrayed by the help of ribbon standing out from the surface, giving to the whole scheme an extremely realistic appearance.

For outerwear many attractive designs are available by using one or other of the clever embroidery machines now being produced by various makers. In the uniart style of embroidery use can be made of thicker

woollen yarns in several colours and the stitching can be arranged with different throws of lengths in such a way that from a few basic colours a whole range of graduated blends can be made by allowing these colours to merge in the stitching. This is the principle on which much of the outer garment ornamentation is being done to-day, and the woollen ground is very suitable, as it appears to blend better with a woollen garment, and it also resembles hand stitchery where the effect is produced in thick yarns and large loops. In many cases a ground effect can be cut out and appliqued, and small touches can afterwards be added to the style, such as white yarn to represent snow, small dots to portray stars, whilst zagged rows of bright coloured wools can be made to portray lightning, or rays of the sun, and so on.



The annual meeting of the Association was held on April 8. Mr. A. Schofield was re-elected chairman for the ensuing year, on the motion of Messrs. A. Collins and W. R. Redpath. Members expressed their appreciation of the very large amount of time and energy devoted by Mr. Schofield to the Association's affairs during the past twelve months. Mr. Schofield, in reply, thanked members for conferring upon him the honour of a second term in the chair, and said that any work he had done in the past had been in the interests of the whole Association, and not for any individual member, and he hoped that his outlook during the coming year would remain unchanged. He appreciated the co-operation and assistance received from manufacturers.

Vice-chairman.—Mr. W. R. Redpath was elected.

Hon. Treasurer.—Mr. B. Laycock was reappointed.

Three Extra Members of Executive.—Messrs. W. P. Thompson, E. H. Williams and J. Bennett.

Mr. W. P. Thompson was reappointed the Association's representative on the Council of the Victorian Chamber of Manufactures.

A letter was received from the Sawmillers' Association, urging members to use cases made in Australia of Australian timber, and it was agreed to ask the sawmillers to submit sample cases and quotations.

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CO-OPERATIVE MARKETING OF WOOL IN U.S.A.

Co-operative marketing machinery cannot change the "unalterable law of supply and demand," but it can stabilise prices and bring the producer more of the consumer's dollars, Mr. C. B. Denman, of the Federal Farm Board before the 65th annual meeting of the National Woolgrowers' Association at San Angelo, Texas, U.S.A.

In urging support of the national wool and mohair marketing agency proposed by the board, Mr. Denman said that much progress had been made in programmes designed to increase production, but that the output of farms, while abundant, was not efficient.

The following is a summary of Mr. Denman's address:—

"This national organisation should immediately attract both the large as well as the small producer. It will be able to finance him, regardless of the size of his operations, and, certainly, the needs of every producer, so far as the control of his market is concerned, run parallel, regardless of the size of his volume. I have heard rather large producers say that they had no trouble selling their product, and that may be true, but as to what effect their individual sale had upon the ultimate price of the crop for that year is a question which might well be debated. Let us hope that the major part of next season's clip will come under control through storage, financing and sales contract to your national association. You should be able to enjoy a more stable price, with all the attending benefits reflected to each producer in proportion to the volume of business marketed by the association.

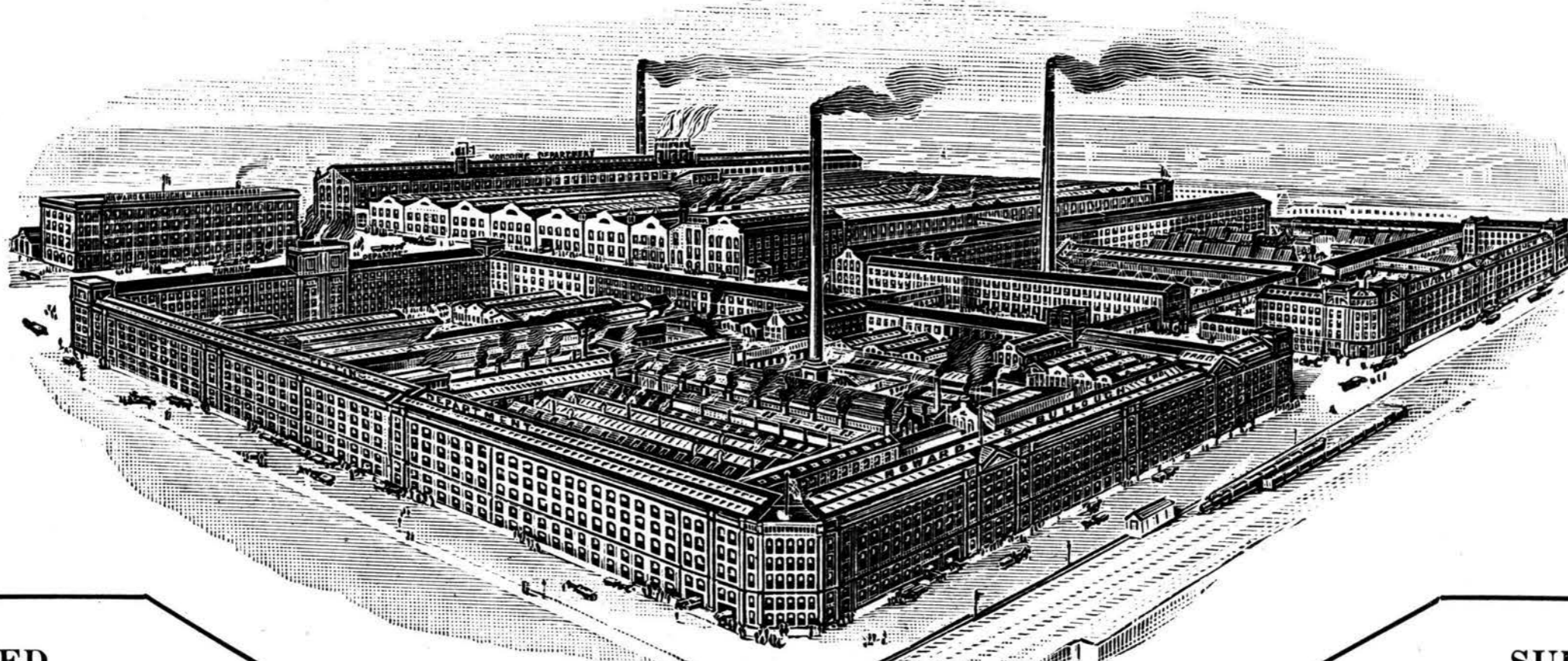
We must not forget that any marketing machinery, no matter how efficiently managed or amply financed, cannot change the unalterable law of supply and demand. However, I do not believe we will ever be able to match demand with the proper supply until we have all the information concerning the supply of that demand, which can be gained by doing our own marketing. There has been a lot of talk about producing two blades of grass where one grew before, or 12 pounds of wool where the former fleece was much less, and we have gone a long way in this production programme; but what I should like to see is to keep that extra blade from maturing or off the market until it is needed, and sell that which we have at a price which will keep you and me in the business and encourage those who are to follow to believe they can make a profit out of the agricultural industry.

Not only can co-operative marketing, amply financed, stabilise prices, but it can, by giving the producer every advantage of grade premium, and by better distribution methods, when and where needed, deflect more of the consumer's dollars to the producers of the product.

Broad Powers at Command.

With broad powers and funds at our command, the Federal Farm Board proposes to help the producers of this country to acquire control of their own marketing machinery, and help them to get sufficient volume of each commodity, so that they may for themselves stabilise, as nearly as possible, the prices of their products and actually effect equality of agriculture with other industry. We believe you are mindful of this need, and solicit your co-operation and support in our efforts to serve you."

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Pruning the Plant Pay-Roll

(Continued from page 151.)

sections and rooms in good running shape—and what is easier than to shove a couple of spare hands on the machines of the workers who are "busted"?

Better by far to settle on the policy of each worker being efficient enough to handle his or her work properly without aid. Only in periods of special upsets or crises should a worker be given help. Often what appears to be an adverse running condition can be quickly improved by taking the bull by the horns and reprimanding the worker in no uncertain manner. Of course, an investigation should precede calling down the worker since the trouble may be due to circumstances entirely beyond the control of the operative involved in the matter.

Another point that must be definitely settled upon so as to obviate any possibility of misunderstanding arising from time to time is that of cleaning the machines. In quillers, winders, spoolers, reelers, and other light machines whose parts are easily accessible, and where there is no danger of injury to the worker, and where, furthermore, the cleaning requires only a bit of brushing or wiping, taking but a few minutes daily, and perhaps a half hour or so at week-ends with the machines stopped—why, the operators of the machines can do the cleaning.

How About the Learners?

How many learners should a department carry? This question requires a dissection of the labour turnover with an eye to immediate future requirements. No specific reply can be given that will cover every case, nor even any one case at all times because of the indeterminate character of the labour turnover. The latter, in textile circles to-day, resembles the vagaries of the sales of newspapers at a public newsstand. One day all sold out, the next with half the stock left over.

But generally, some fair estimate can be made of the turnover as any particular section, and arrangements may be made to keep a certain number of learners about the firm. A word here, however. Learners consume a concern's money, and the time of someone to teach them, and of someone to supervise them. It is a larger problem than appears on the surface.

It must be quite evident that to keep labour costs under control that the matter of production requirements will have to be kept in the foreground. When the production fluctuates greatly in short periods of time, it is a difficult proposition to control the costs to a point where one feels reasonably certain that the minimum has been attained.

For example, given a weekly pay-roll of £800, and a production figure of 40,000 units, a labour cost of 5d. is reached. Now, let the production drop to 30,000 units, and in spite of what one does the cost will be over 5d. This is due to the fact that one cannot always dispose of sufficient workers to bring the cost to a par with the larger production because of other factors that enter the case, and which are not always to be foreseen until the new situation is at hand.

However, should fluctuations occur with frequency, an average can be struck with reasonable accuracy which will

(Continued on page 189.)

THE DEVELOPMENT OF THE AMERICAN F.F. KNITTING MACHINES.

There has been little question of the advantages of a standard machine built by mass methods over the individual machine, produced, so to speak, on a made-to-measure basis. Take item for item, and compare them on down the line—automobiles, cranes, grinders, milling machines, electric motors, lathes, punches—there is a well marked difference in favour of the standard machine of standard parts and simple design and construction.

Nowhere is this more apparent than in the development of the American full-fashioned knitting machine, and the phenomenal growth of its makers, the Textile Machine Works, of Reading, Pennsylvania.

The story of this firm, from its modest beginning in 1898 to its present dominating position in the field, is a veritable "romance of industry."

Prior to 1900 all full-fashioned knitting machines in the United States were necessarily imported at great expense, and, because of the made-to-order characteristics of European machinery, interruptions were frequent and breakdowns tied up production for months.

Obviously the operators of those early full-fashioned machines must have found it discouraging to compete both with the cheaper American-made seamless stocking and the foreign importation of their own product. But the demand for a better quality stocking was there; tariff on hosiery importations favoured home industry; the need for an American machine was obvious—a machine which could turn out a product equal or superior to that of the foreign devices, plus the essential advantages of standardised design and dependable performance.

Being well equipped with both practical engineering experience and adequate manufacturing facilities, Messrs. Thun and Janssen formed the Textile Machine Works, and under their direction the first American-made full-fashioned knitting machine was designed and built. The "Reading," from its initial appearance, has proved itself especially adapted to the particular needs of the American manufacturer, i.e., the economical production of quality hosiery on a quality basis. How well the "Reading" has met this requirement is shown by the fact that America

is now the largest producer and consumer of full-fashioned silk stockings, with the majority of this vast output made on Reading machines.

The popularity of the "Reading" machine is not merely a tribute to the inventive skill, correct design and precision workmanship of the builders of this equipment. **The superiority of the product itself**, and the ability to produce on a rational basis, has brought complete success to manufacturers of full-fashioned hosiery produced on "Reading" machines.

It is well known that the pioneers in this field, and also those who have followed later, have been eminently successful with "Reading" equipment, and the stockings produced by these manufacturers are recognised by the consumer as representative of the highest quality.

Fundamental principles of engineering have undoubtedly played an important part in the development of the "Reading" equipment, and in the success of the machine itself.

These principles are simplicity of construction and flexibility. In a machine where over 80,000 parts have to work in perfect synchronism over a length of practically 43 feet, it is, perhaps, only relatively justified to speak of simplicity; still, it is a fact that, by comparison, the "Reading" machine is the most simple in construction, and, because of the manufacturing methods, the most accurate.

In the manufacture of full-fashioned stockings, as well as in other industries, it is necessary, of course, to make improvements almost without interruption. The demand for feature stockings, for instance, necessitates the development of new attachments. A more competitive market may make it expedient to increase the number of sections, or the speed in the machine, and here, again, the manufacturers of the "Reading" machine protect the operator of this equipment.

No improvements or additions to new types of machines are made that cannot be added without any difficulty to the existing types. The danger of obsolescence, therefore, never faces the manufacturer of full-fashioned hosiery operating "Reading" equipment.

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Rayon and the Wool Textile Trade*

By F. W. Fearnside, F.T.I.

(Continued from Last Issue.)

Coming to the worsted trade, we find that rayon has made rather serious inroads in various directions. Nowhere probably has its influence been so much felt as in the hosiery yarn spinning section of the trade. The vogue of the knitted jumper, which might well have resulted in a wool boom which would easily have made the fortunes of hosiery spinners in this country, served instead to establish the new rayon industry. Enormous quantities of the new yarns, untested, untried, little understood either by producers or users, went into consumption. It was a trade foredoomed to failure, so unconscionably heavy and uneffeminate were the garments produced and worn, and withal so lacking in durability. So far as concerns hosiery and knitting yarns to-day a sort of compromise appears to have been reached. The dazzling, slippery, heavy rayon yarns have given place to union twist yarns composed of rayon and wool, beautiful yarns both as regards appearance and handle. Their durability is far superior, as is also their utility in the matter of warmth. In the construction of yarns of this type there is likely to be a steady application of rayon. Rayon has found in them one of its permanent and sure outlets.

Reference has been made in a previous paragraph to mohair and lustre linings. It is in these that the worsted spinning and manufacturing trade of Yorkshire has suffered most seriously. Whatever mohair spinners may say and wish us to believe to the contrary, the rayon lining has displaced most of the mohair linings; and so far as concerns lustre linings there is no doubt that rayon has dealt a most deadly blow. In the earliest attempts at rayon lining manufacture certainly many mistakes were made. At times it seemed to some manufacturers that their endeavours to produce satisfactory, durable fabrics with rayon were all going to end in failure and disastrous loss. Even when, after repeated trials, a piece was woven satisfactorily, sure enough it did not survive the dyer's and finisher's touches. However, as far back as fifteen years ago several manufacturers, with the valuable co-operation of dyers and finishers, were able to put on the market lining materials which almost immediately began to react against the mohair and lustre lining trade. Progress was not by any means rapid, and it is really only during the last six or seven years that the rayon lining can be said to have established itself. This was largely due to one or two of the leading Bradford manufacturers deciding to concentrate their entire attention on this fabric. During the past five years the rayon lining for men's wear has become a standard line, which is being included in the ranges of bulk trade fabrics used all over the world. It has come to stay, and has ousted not only the mohair and lustre linings, but

also the better class cotton linings, which latter were already, at the time of rayon's appearance, beginning to prove serious rivals of the mohairs and lustres.

Whilst on the subject of mohairs and lustres reference should be made to another class of fabrics into which rayon has entered very extensively, and in which it is to-day playing a very important part, viz., velvets and plushes. Prior to the coming of the rayon fibre the plush trade was one of the principal outlets for mohair, which, on account of its high lustre and fairly strong fibre structure, was admirably suited for the production of pile fabrics. Rayon, a fibre at once capable of substituting either mohair or silk as desired, was seen to be especially useful in connection with both plushes and velvets. Some time was taken by makers in overcoming various difficulties in manufacturing the fabrics, but that these have been satisfactorily overcome is evidenced from the fact that to-day the rayon pile fabrics are occupying a very important place among the rayon textures. They are used extensively both as furnishing fabrics and as dress materials. This year, in particular, the panne velvets are expected to have a very great demand. Several makers are guaranteeing their productions as being uncreasable and uncrushable.

It should be said that the developments that have occurred in more recent years in connection with the rayon staple fibre yarns have very materially assisted manufacturers of pile fabrics, the staple yarns being much more suited for pile production than are the filament yarns, owing to the greater "fullness" they give. A further noteworthy point in connection with these goods is that rayon, lending itself more readily to treatment when in wet or damp condition, has provided the maker and finisher with means of producing a number of entirely novel types of fabrics not possible with the fibres hitherto used. Imitation furs and skins, in almost infinite variety, are now being put on the market, the production of which has been rendered possible solely by the rayon constituent forming the pile of the material.

It is probably in connection with rayon staple fibre material that wool will find in rayon its great competitor. So far we are, apparently, but on the threshold of the textile activities which this type of rayon is opening out. Enough has already been revealed, however, to indicate not only to manufacturers, designers and salesmen, but also to consumers, that the possibilities ahead of staple fibre rayon in connection with or in partial or even entire replacement of wool fibre are very considerable.

Staple fibre rayon is not really a new development of the rayon industry; it is one of the oldest, one which was tried on the Continent fifteen or more years ago, when

*Reprinted from "Jentgen's Rayon Review."

(Continued on page 184.)

Costing from a Manufacturer's Standpoint

Mr. D. R. H. Williams (Huddersfield) gave a lecture on "Costing from a Manufacturer's Point of View" before the Bradford Textile Society (reported by the "Textile Argus"). Mr. Charles Raper presided.

Mr. Williams said that in a large number of cases the attitude of the manufacturers towards costing was, to say the least, alarming, and showed that they had not realised the great possibilities of accurate costing.

Do you know whether each cloth you are making is producing a profit or a loss?

Are you making a profit or a loss in the buying of your materials, or in converting those materials into cloth?

Can you say whether you are allowing per yard or piece a sufficient sum to cover wages, overhead charges, pattern expenses, returns costs, etc.?

How often are you satisfying yourself that the sum you are charging in your costing for these operations is sufficient or not?

These were some of the questions which Mr. Williams said he would put to a manufacturer to ascertain if he had an efficient system of costing in operation at his mill.

He advocated the application of the advice, "Base your prices on costs, and let your costs be correct."

Happy-Go-Lucky Methods.

If customers were consulted on the subject of costing they would say: "Have no system at all. or go on with your happy-go-lucky system. See what your neighbour quotes, then quote below him. Cut your prices, scoff at scientific costing, and say that, while it may apply to other industries, it cannot apply to yours."

But, added Mr. Williams, such methods did not create business or help industry, and men who practised them were simply letting business down very badly, and showing that they did not understand it. Moreover, the customer would be better served in the long run by firms with scientific and accurate costing methods.

As an illustration of how scientific costing helped in

business Mr. Williams said that in the old days it used to take a man a week to cost his cloths before setting off to London with his patterns, whereas it could now be done in two hours, and be absolutely accurate. One man he knew merely had to refer to two tables and do a simple addition sum to ascertain his costs.

Foolish Price-Cutting.

Mr. Williams then detailed the system of costing as generally practised in the fine cloth trade of the Huddersfield district, and which he claimed to be specially applicable to the wool-textile industry. This industry, as had been frequently pointed out, was very seriously handicapped by the high wages cost of production. Some of the markets, especially for the lines known as bread-and-butter stuff, had disappeared, and, in his opinion, had disappeared for good. Competition, which was having to be met both at home and abroad, was keener than ever. He did not think that in certain foreign markets we could compete at all with our existing wages costs, and unless there was an alteration in this direction trade would go from bad to worse. It was no time for silly, reckless price-cutting or refusing to face business facts. Price-cutting was going on right through the industry, spinners being as guilty as manufacturers, and this was not doing the trade as a whole any good. He thought it was time to settle down and ascertain exactly what our goods were costing us, and to concentrate on the class of goods on which a reasonable profit could be made. The system of costing he had described was a practical one, and joined up with the ordinary systems of accountancy which were in use in modern mills.

ERROR IN BREEDING.

Sir Frederick Aykroyd (says the "Textile Mercury") has taken the lead in pointing out the immense amount of harm which has been done to the New Zealand wool-growing industry by an error in breeding, which results in a single staple containing several different qualities of wool. The introduction of the Romney ram has brought about a deterioration of the Dominion clip by causing wool to be produced which is not true to type.

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Wool and Its Uses

By W. Hunter

Mr. W. Hunter recently gave an address before the Bradford Textile Society (reported by the "Textile Argus") entitled: "Some Reflections on Wool and its Uses," in the course of which he said:—

So much has been written about the scientific side of wool, its manufacturing properties, and its inherent virtues, that I shall endeavour to deal more with the commercial side of the wool trade, although incidentally I shall naturally be obliged to refer in the latter part of my paper to its peculiarities and usefulness.

No one can consider the quantity of wool retained for consumption in this country compared with before the war without a feeling of uneasiness or disappointment. Many leading members of the industry have been accused of grousing, and to all appearances a large section of the general public are content to regard the position as more or less normal and in conformity with trading conditions throughout the world. It is necessary, however, to put things in their correct perspective, and not to shut our eyes to an obvious economic fact. I cannot conceal my disappointment when I compare the quantity of wool retained for consumption in this country last year with the figures for 1913. They are:—

1928	1,338,000 bales
1913	1,497,000 bales

This reduction is more serious than appears at first glance, although it accounts for a certain amount of the unemployment and lack of machinery activity which has existed in this country for so many years. But considering it in conjunction with the great increase which has taken place in the exports of Australia, New Zealand, and Cape wool between 1913 and 1928, amounting to 1,700,000 bales, one begins to realise where our competitors have drawn their raw material supplies from, and asks oneself the question why the wool textile industry of this country has not been able to absorb its due proportion of this amazing increase. We cannot afford to operate machinery only eight hours out of the 24 when such a large consumption is going on. It is contrary to the enterprise which built up the British industry in the past.

A Flood of Wool.

We have been told on many occasions that the wool trade is "down and out"; that in consequence of the fierce competition of rayon and other synthetic fibres there is no prospect of a revival in the wool industry, and it is to be regarded as permanently "down and out." Do not be disheartened. Considering that the total world production of wool is 3,300,000,000 lb., remember that this vast quantity of wool changes hands once a year, and is consumed in various forms by the white and yellow races, and that the carry-over from last season in this country was not more than sufficient to run Bradford's machinery for a month, and you will then begin to realise to what extent the wave of pessimism has swept over the whole of

the wool-textile industry of the world and made it feel that the future is without hope.

Wool Used Per Head.

America is the only country which issues reliable statistics, and although we do not regard the American wool-textile industry as the ideal—it is hedged about with so many restrictions—we must accept the figures which are published as the yard-stick for measuring the requirements of modern civilisation. America imports 1½ lb. of carpet wool per head of the population. If this proportion is applied to the wool-consuming population of the world—687 millions—at least 100 million pounds of carpet wools are used annually. This figure is confirmed by multiplying the number of sheep—240 millions—which produce carpet wools, by 5 lb. per head; you then arrive at practically the same quantity of 1000 million pounds as the available supply of wool for the carpet industry.

In spite of the prejudice against wool resulting from the high tariff now imposed on all imports, America consumes about 5¼ lb. of wool per head of the population, of which, of course, 1½ lb. is carpet wool; but we are justified under these circumstances in assuming that 5¼ lb. per head of the population is the minimum quantity which the wool-consuming public use; it will probably be found to be more, as there are not such artificial restrictions in other countries.

Wool and Mutton.

With these few introductory comments I pass on to what I hope will be the more interesting stage of my remarks, namely, wool and its uses. Sheep have been regarded from time immemorial as a great asset to any community. To-day sheep and wool are the backbone of the exports of Australasia and South Africa; in fact, they are the link which binds these Dominions and the Empire more closely than any other commercial link we have. So much has been said about the imperfections in wool that one might almost conclude that farmers had no other interest in life to consider but to provide raw material for the wool-textile industry.

The peculiarity of the land, the type of feed available, the demand for mutton, the climate, and the farmer's resources determine the type of sheep which he raises. The demand for frozen fat lambs from New Zealand is the factor which dominates the type of sheep kept in New Zealand. Before the war New Zealand produced about half the lustre wool which was required in the industry, and, in the north island, bred mainly the Lincoln type—big bold sheep bearing bright lustre wool. There was such a glut of this wool on the market at the end of the war that farmers turned their attention to the production of a smaller-bodied sheep producing wools which could be used for a variety of purposes, and for this reason introduced the Romney, Southdown, Dorsets, and Suffolks, as they produce a carcass which is more suitable for the frozen meat trade, and also for domestic requirements.

When the heavy industries of this country are working at full pressure there is a continuous demand for large joints of mutton, and this demand has helped to maintain the production of heavy-bodied sheep in Lincolnshire and Yorkshire. There is, however, a noticeable change in the demand, presumably owing to the lesser consumption of meat by the workers in these industries, and the sheep carrying the bright lustre wools are to some extent being replaced by the Border Leicester and the half-bred sheep, which produce the smaller joints now so popular throughout the country. If a farmer can make £3 to £4 per head for his sheep, and only 10/ for the wool, it is easily understood why he studies the demand for mutton and lambs, and we must not take too critical a view of the wool which he produces, but must on the other hand adapt ourselves to changing conditions and make the best of it. We can, however, guide him against the imperfections which develop, without interfering with his selection of the types most suitable for his requirements.

Changing Australian Conditions.

If the price of mutton falls below a remunerative level, the farmer turns his attention either to dairying or other pastoral pursuits. It is probably for this reason that we get such a variety of grades of wool in this country—they number 800 to 900; and in Australia, under the Government Appraisal Scheme, the wool produced there was graded into 848 classes. The breaking-up of the stations in Victoria and South Australia is changing entirely the character of the wool grown in those States. A larger percentage of crossbred wool is being grown, as the farmers are now breeding both for the frozen mutton trade and for domestic consumption. In New South Wales the change is not so marked; in Queensland, where it is impossible to cater for the frozen mutton trade, farmers have been obliged to concentrate on the production of wool suitable for the industry's requirements, and for this reason the character of the wool has not changed. It is impossible, owing to the lack of vegetation in large areas, to keep more than one sheep to 20 or 50 acres, and even then there is not sufficient nourishment for a crossbred sheep, and the whole of the country is producing wool of very fine texture. Leguminous plants like lucerne and subterranean clover, when introduced to replace the natural grasses and herbage, have in some districts allowed breeders to double their stock. One cwt. of superphosphate will almost double it again, so that the possibilities of expansions both in the Cape and in Australia are great.

Importance of Carpet Wools.

You are no doubt all aware that a large proportion of the world's sheep population produces wools which are in the main suitable only for floor coverings. So little of this kind of wool is produced in the United States of America that they allow it to be imported without duty,

provided it is used for carpets or other similar floor coverings. This may appear to be a very simple regulation; it certainly is an enormous concession to the carpet manufacturers of the States, but how many of us realise the effect of it on the value of the wool we are discussing, and the far-reaching effects of this regulation? Briefly, America imports 174,000,000 lb. of carpet wool annually, and, as this wool can be imported free, is used for carpet purposes, whereas if used for other purposes it pays 6d. per lb. import duty, you can well understand that as much use will be made of this wool as possible—for purposes other than that for which it is prescribed—as the import duty on other wools, whether used for the woollen or worsted trades, is 17d. per lb. on the clean-scoured weight.

This discrimination in favour of carpet wools has interfered enormously with natural trade tendencies. At one time, English manufacturers were able to use large quantities of East Indian, Egyptian, and China wools, but now the bulk of the wools from these countries is shipped direct to the States, and, strange as it may appear, large quantities of wools to substitute these are now being imported into East India, China, and the Levant from New Zealand and South America, as they can be imported cheaper than the price at which the domestic wools of these countries are exported.

Softness of Handle.

It is always considered that the pure vicuna from South America, of which there is only a very small quantity available for the world's requirements, is the softest and finest animal fibre grown, and is for this reason very expensive; but the most expensive fibre—and the fibre which can be obtained in relatively large quantities, and in my opinion is the softest to the touch of any of the animal fibres—is that produced by the Angora rabbit. In pre-war days I was very interested in this material and very much impressed with the use to which it can be put, and its wonderful soft handle. When I handle merino wool from Australia I take as my standard the handle of the best white Angora rabbit wool. The wools which most nearly approximate it are the finest grade of Geelong, Victoria, and the finest lambs' wools grown in the same district. It is for this reason, no doubt, that manufacturers who require the best-handling wool goods turn to this market for their supplies, and are always obliged to pay fancy prices for them.

(To be Continued.)

COTTON PIECEGOODS MANUFACTURERS.

A meeting of the Cotton Piecegoods Manufacturers' Section of the Victorian Chamber of Manufactures was held on April 24. Mr. D. I. Dickie occupied the chair. Mr. E. Waddington was reappointed the section's representative on the Council of the Chamber of Manufactures. Matters in regard to tariff and the general state of the trade were discussed.

TEXTILE DYERS & BLEACHERS LTD.

MENTMORE AVENUE, ROSEBERY, N.S.W.

Dyeing, Bleaching, Stripping, and Finishing of all classes of Textile Material

Defects in Dyeing

*Specially written for this Journal by
"Xela"*

Many faults found in finished goods are attributed to dyeing, for which this process is not responsible.

Defects in dyeing may be classified under three distinct heads:—

- (1) Material to be Dyed.
- (2) Previous Processes.
- (3) The Dyeing Operations.

No two samples of material will be found alike in shade, irrespective of its being dyed in the wool, yarn, top or piece. The wool to be dyed varies from the finest Saxony fibre to the lustrous hair of the Angora goat, and, as varying qualities of wool have varying affinities for mordants and dyewares, it is remarkable that so many favourable results are obtained.

Samples of fine and coarse wool, dyed in the same bath, reveal different shades. The fine wool will appear of a much darker shade, while the coarse wool is more lustrous, which is probably due to the more pronounced scale reflections thrown off from the fibres.

Different classes of wool do not absorb equal quantities of dyestuffs, even under similar conditions. In view of these facts considerable care is needed in choosing and blending wools for P.D.'s, as this operation, carefully performed, will materially assist the dyer. Wools of a kempy nature should be carefully avoided when blending. The "kemp," which is in reality a hair, can only be dyed with great difficulty to show up clear and lustrous in the dyed piece.

Previous Processes.

Imperfect scouring of wool, or fabric, acts as a resist. Imperfect cloth scouring may be detected in the piece either by smell or by means of running the thumbnail sharply down the fabric, when traces of soap will be observed. Hard water used in scouring wool or piece-goods causes precipitation of Ca soaps, which act as a resist when allowed to remain in the material.

Ca and alkali left in wool are more injurious in the case of mordant dyes, because they chiefly neutralise mordants, and in some cases precipitate dyestuffs. With acid dyeware alkali would be neutralised by acid used

in dyeing. Wool stored in alkaline state is liable to develop mildew, rendering it tender and difficult to dye.

Defects developed in carbonising wool may be acid stains, which cause local depositions of colour, and on occasions acids used in carbon precipitate the fatty acid, which resists mordants and dyestuffs.

When oiling wool preparatory to spinning, mineral oils may have been used, which are not removable by ordinary scouring methods, and invariably cause spots or streaks in the dyed goods.

The yarn-spinning process may lay the foundation for dyeing defects by unevenly spun threads with varying turns per inch, a loosely-spun yarn taking on more colour than a harder spun one.

In warping old and new yarns of the same quality as sections in the warp it is a frequent occurrence to see different shades after dyeing. The variation in the tension of warp sections is almost indiscernible in the grey state, but shows up distinctly when dyed.

Milling creases should be thoroughly cleansed before dyeing, as the dyestuffs will be resisted by any soap particles left in the cloth, and all possible precautions should be taken to eliminate faults from previous processes detrimental to dyeing operations.

Dyeing Operations.

Defects in dyeing operations are chiefly due to faulty manipulation. Shortage of assistants is the cause of too rapid mordanting, which has the effect of making the mordants loose and uneven. Unevenness is also caused by too rapid dyeing and by allowing the goods to enter an excessively hot dyebath, while an overlong working period causes the material to become matted, harsh and tender. This applies chiefly to light shades, which require to be worked longer than the dark shades. An excessive amount of acids tends to felt material.

The most common faults encountered in finished goods are streaks and unevenness. Among the many causes for this defect are the addition of colour without first lifting the goods from the vat; by careless stitching together of piece ends; by iron stains, which produce spots and marks; and by allowing the cloth to run in folds while dyeing.

J. DYSON & SONS PTY. LTD.

Textile Engineers

**Verner Street,
SOUTH GEELONG**

Manufacturers of TEXTILE MACHINERY, including—

Automatic Feeders, Wool Scouring, Improved Patent Wool Drying, Patent Continuous Carbonising Bowl, Burr Crushers, Dyeing Machines for Wool and Piece Goods, Indigo Vats, Hawking, Piece Squeezing, Piece Milling, Piece Scouring, Combined Scouring and Milling, Warping Mills, Pulleys, Plummer Blocks, Heald Shafts, Picking Sticks, Condenser Bobbins, Gear Cutting, Oxy Welding, Spot Welding.

The Outfitter as Clothes Expert

Customers Need and Appreciate Information
on What to Wear.

There is always room for the expert. The person who devotes his whole attention to a question, and is accordingly better informed upon it than anyone else, is certain of a hearing. His advice is sought and valued.

In that turbulent assembly, the House of Commons, the member who is the acknowledged specialist in his own sphere is always listened to with marked attention.

The outfitter stands in the important relation of such a specialist to his customers, and the more he stresses that aspect of his service the better for his business. These facts being indisputable, the practical question at issue is: "How can they be best put in a convincing manner to the public?"

How can it be most strongly impressed upon the ordinary customer that the best-dressed man is he who is most ready to accept the advice of his outfitter?

The whole matter turns on the pivot point that comfort is not the sole criterion of dress. A scarlet suit might be warm and easy to wear, but it would hardly be suggested that any normally-minded customer would be satisfied to be fitted with such a garment.

The public must be brought to the view, largely accepted in the trade, that it is the outfitter and not the customer who is the expert, and that the outfitter is in a privileged position to understand quality, style and comfort.

There is no mystery or difficulty about this kind of propaganda; it merely means thought and organisation. It means working out the conception of expert service in regard to all that concerns a man's clothes outfit, as the keystone to all other classes of service to the customer.

Plain Speaking Best.

The secret of all successful publicity is to be definite; to make a claim and stand to it. Renan, the famous French author, said that the public is impatient of argument, but it is always willing to listen to the person who proclaims a fact right away and sticks to it. An ounce of assertion is worth a ton of polemic so far as convincing the public is concerned, and the outfitter who boldly takes the initiative and builds on this peculiarity of human nature has a clear field.

In addition to this, there is the force of the printed word, that can find expression in window tickets or leaflets. The plain statement:

"Stripes are the dominating note."

"The single-breasted lounge suit is fashionable" or

"Three buttons are the vogue"

will carry far more weight and impress itself far more deeply on the attentive mind than a longer explanation that leaves a loophole for argument about the matter. Besides, the whole art of a well-worded advertisement is simplicity. The fact can always be put in a few familiar words, long statements are apt to become confused and to irritate.

The outfitter who makes up his mind to appeal to the customer along the lines suggested has two methods of approach (a) personally at the counter, and (b) imper-

TEXTILE ENGINEERS

Davies, Simpson & Kirwood
Pty. Ltd.

Patterson St., Abbotsford, Melbourne, N9.

Manufacturers of Silk and Wool Winders, Machines for Scouring, Dyeing, Drying, Bleaching, Warping, Pressing, Finishing, and Yarn Scouring.

Elevators and Conveyors, Hoists, Ventilating Fans, and Machine-cut Gears.

TELEPHONE J 3047.

Agents for N.S.W.:

L. J. FOSTER & CO., 235 Clarence Street, Sydney.

J. A. FLOYD & Co.

Textile and General Engineers

Manufacturers of

Silk Winders Dyeing Machines Steam Presses

Wood Bobbins Humidifiers Wool Winders

Scouring Machines

All Classes of Repairs.

43a Margaret Street, Moonee Ponds, Vic.

Cable and Telegraphic Address: "Dyolf," Melbourne.

Code: A.B.C., 5th Edition.

PHONE: F 5294.

J. WOOD

A.M.I.Mech.E.

MACHINERY MERCHANT

Specialty—TEXTILE MACHINERY

"ZEROLIT" WATER SOFTENERS

487 COLLINS STREET, MELBOURNE

Telephone; Central 1615.

And at 3 Spring St., Sydney: 36 North Par., Bradford.

Cables and Telegrams—Woodtextil, Melbourne; Woodtextil, Sydney; Woodtextil, Bradford. Telephone, B 2574.

CAMPBELL & HARKER

CONSULTING, ANALYTICAL

AND

INDUSTRIAL RESEARCH CHEMISTS

F. H. Campbell, D.Sc. (Melb.), F.A.C.I.

G. Harker, B.Sc. (Syd.), D.Sc. (Lond.), F.A.C.I.

"Chamber of Commerce Buildings,"

35-43 William Street, MELBOURNE.

Tel., Central 2315.

sonally through the medium of the window and the post. It will be wise to consider each of these methods of advertising separately.

Selling is largely a question of atmosphere, because there are indirect as well as direct approaches to every customer's mind. The provision of fitting rooms in a shop has a potent psychological effect, quite apart from the fact that customers appreciate their convenience. They suggest an attentive personal service. In the same way the clothes worn by the assistants will have an unconscious influence upon the customer's thoughts. A man is always open to suggestion to purchase the class of garment that he sees displayed around him when he enters an outfitter's establishment.

The window offers an exceptionally valuable opportunity of putting the expert idea into practice. Fashion plates supply a regular feature for a style note, and they could with advantage be supplemented by a brief talking ticket giving further details of the modes of the moment. Topical windows are always interesting, and in this connection sports and other seasonal wear can be advertised. People are always hungry for information, and facts about fashions will be read by a large majority of the passing public if expressed in terse and direct statements.

Keeping this specialist principle clearly in mind, a number of displays dealing with details might be staged. These windows could draw attention to cut, linings, buttonholes, and so forth; all designed to illustrate the expert nature of the services offered by the outfitter.

Another avenue that may be profitably explored is to impress upon the customer the importance of having the correct shirt and tie for each suit. The outfitter might well take a leaf from the draper's book in this connection. By bringing ladies' handbags under the influence of fashion a draper now sells a dozen bags where he formerly sold one. Instead of being satisfied with a single bag for all occasions, the draper's customers to-day purchase a pochette to harmonise with every coat or dress.

Most outfitters advertise, from time to time if not regularly, in the local press, and these occasions afford an opportunity of carrying out this policy of making a special appeal to potential customers as well as serving to remind friends of the house of the expert services at their disposal.

The perusal of a number of the outfitters' announcements printed in provincial newspapers suggests that they might easily be made far more striking, and a few headlines in regard to prevailing tendencies in cut, colours and patterns would render them a far more valuable form of advertisement.

All traders take advantage of the facilities offered for approaching prospective customers through the post, and here again a few facts can be made to "pull their weight."

It is wise when drafting a circular to be sent out by mail to avoid stating the obvious. The leaflet might start by saying that it is sent out by Messrs. Blank and Co., men's wear specialists, who supply clothes of character, and can, therefore, guarantee that the cloth will be right, the cut right and the fit right. The question of colour should be far more emphasised than it usually is in such leaflets. Another point that could be worked up into interesting notes is the matter of business and professional requirements.

A man is flattered by any reference to his occupation, and a tactful mention of the bank or the office will induce the recipient to read a circular that he might otherwise pass over. All these are points worth considering when sending out written appeals for custom.

The main thing is to push the idea in all these ways at the same time. To assume the attitude of the specialist at the counter, proclaim it in the window and urge it in the post.

It is only in that way that the initiative can be seized and retained.

Catalogues should give, in addition to prices and illustrations, notes upon styles for the season; hints on the best clothes for specific occasions (particularly in the case of sports wear); guides to ensembles; occasionally a chart of correct wear. This information is being supplied by several of the most successful men's wear houses, and it is in the development of this type of booklet that the man's catalogue of the future lies.

It is a mistake to assume that men do not want information about what to wear and when to wear it. They may be ashamed to admit ignorance on these points, but they want it just as much, and often even more, just because of that. Tact on the outfitter's part is the supreme requirement, tact and an exhaustive knowledge of his subject. These two qualities, combined with determination and willingness to spend the necessary money (which need not be at all a large sum) will do wonders in attracting new customers and in consolidating the friendship of old.—"Men's Wear Organiser."

An optimist is a man who sees every difficulty in his path, who is not daunted by them, who hopes for the best, who leaves as little as possible to chance, and who works like a tiger.

TEXTILE MACHINERY

Specialising in

2 and 3 Bed Steam Presses
2 and 3 Roll Calenders
Dye Machines (Rotary and Piece)
Scouring Machines, Vats
Cylinders and Dials

Machine Repairs
Dry Rooms, Loop Dryers
Washing Machines
Hosiery Shapes.

SMITH & WRIEDT PTY. LTD.

The Textile Service Engineers

137-141 Johnston Street, Fitzroy

Telephone J 3328

Australian Agents; W. C. JACKSON & CO., Melbourne

DATA ON EFFECT OF CALENDERING ON THREAD COUNT AND STRENGTH.

The figures in the accompanying tables are given, not because they necessarily prove anything, but as interesting information on what actually happened to the thread count and to the strength in a series of experiments on light-weight cloths.

In the first table (compiled by the National Association of Cotton Manufacturers) the grey construction is shown. The weight is given in ounces per square yard, the yarn number as determined by the mill making the cloth, the thread count as actually found in the cloth, and the strength as determined by breaking five specimens in each of the warp and filling directions. As the cloth was made for balloon cloth, the War Department specification calling for a one-inch strip test was used in determining the breaking strength. Three of the grey cloths were finished by putting them through what was known as a regular calender, and four through a heavy calender. Only one fabric was put through the regular and heavy. As would be expected, the calendering pulled down the width of the cloth with the attendant increase in the number of ends per inch and a decrease in the picks per inch. This change in the construction was reflected in most instances in the change in strength. Such inconsistencies as occurred are probably due to the variation in the cloth rather than to the variation in the general effect. Apparently, the finer the yarns and the higher the thread count, the more effect that calendering will have on the count and the strength. These experiments also tend to show that calendering as such has little effect on the combined strength of the warp and filling.

Grey.

Sample	Weight oz. per sq. yd.	Yarn No.		Count		Strength 1 in. Strip	
		W	F	W	F	W	F
1	2.6	83	83	141	135	45	37
2	2.8	77	77	124	132	44	53
3	2.6	70	70	118	124	40	40
4	2.7	65	65	110	110	42	33
5	2.6	59	59	97	108	35	36
6	2.6	53	53	92	90	42	32
Regular Calender.							
1	2.5			148	132	50	39
2	2.8			128	123	50	44
6	2.6			97	84	41	29
Heavy Calender.							
3	2.5			123	117	42	33
4	2.7			116	104	45	31
5	2.6			101	103	36	38
6	2.6			96	85	42	30

Lancashire Cotton Corporation Ltd.

have authorised a further increase of capital for the purpose of absorbing eight further companies. The companies to be absorbed are as follows:—Brunswick Mill, Ancoats, Manchester; Old Hall Mill, Dukinfield; G. Fox and Sons Ltd.; Palmer Mills, 1919, Ltd., Stockport; J. and T. Garnett Ltd., Bromley Cross, near Bolton; Park Place Spinning Co. Ltd., Blackburn; Yates, Castleton Ltd., Castleton, Lancashire; Whitelands Twist Co. Ltd., Ashton-under-Lyne; and Orme Ring Mill, 1920, Ltd., Oldham.

**Who Are You?
Where Are You?**

**What Have You to Offer
in Goods and Service?**

TELL THE BUYER

Advertise in

**The Textile Journal
of Australia**

PUBLISHED MONTHLY
Circulating Throughout the
Commonwealth of Australia

Advertising Rates on
Application.

FRANK C. MARDEL, Publisher,
Temple Court, 422 Collins St.,
Melbourne, C1.

Telephone, Central 6936

AUSTRALIAN DYERS' ASSN.

PTY. LTD.

157-161 Burnley Street,
Richmond

Phone J 3451.

**SPECIALISTS IN DYEING,
BLEACHING AND FINISHING**

Managing Director - - - D. HISLOP.

POSITIONS WANTED.

Position required by Yorkshireman as Manager of Woollen and Worsted; long experience from greasy wool to finished cloth; also in Warp Knitting of Ladies' Dress Fabrics in Silk, Artificial Silk, Wool or Cotton.

"Expert," Box 149, "Textile Journal of Australia."

Dyer, Young Man, English technical training, seeks change with opportunity for advancement. Any State.

At present engaged on small batch dyeings and experimental work on all classes of textiles for large mill. Quick and accurate colour matcher.

Replies to Box 150, "Textile Journal of Australia."

Rayon and the Wool Textile Trade

(Continued from page 176.)

it became necessary to discover some substitute for the wool staple, of which there was such scarcity. With the return of wool supplies, however, the rayon staple and its possibilities were, apparently, dropped. The interest aroused by the activities of Sniafil, the staple product put upon the market five or six years ago, seems to have marked the recommencement of activities in connection with this type of rayon, activities which appear to have steadily gone forward since that time.

In the west riding there are two or three firms, previously actively engaged in combing mohair, alpaca and other staples, which are now devoting their entire plants to combing and carding rayon staple. Rayon waste and rayon cut staple were experimented with by these people, and as a result of their research and experiment it has been found possible to manipulate the fibre on existing combs and cards. Every year the production of these firms shows greater increase. Demand for the staple rayon is coming from manufacturers in the west riding and abroad, clearly indicating that in this material are possibilities that have not yet been realised, hence that the future of the staple fibre rayon industry may yet reveal developments of far-reaching importance, not only to the rayon industry but to the textile trade as a whole, and the worsted and woollen sections in particular.

The earliest successes in the employment of staple fibre rayon were in its admixture with wool staple. Staple rayon tops were blended with botany tops in various proportions, the rayon top sometimes being first dyed, sometimes itself a blend of differently dyed rayon tops. Blends of rayon and wool of fifty per cent. of each fibre have been employed in the manufacture of suitings and dress materials. Much more common, however, have been the experiments with blends containing twenty-five per cent. of rayon. In this proportion the percentage of rayon suffices to serve a very useful purpose. At the same time its presence in the fabric does not detract from the intrinsic value of the cloth through any demerits the rayon may possess as compared with the wool. In the manufacture of fabrics of this kind the advantages of using blended rayon-wool yarns will readily be seen. In the first place the manufacturer has in them a material which enables him to do a mixture fabric trade as easily as if it were a straightforward grey and piece dye trade. Assuming, for instance, that his yarns contain twenty-five per cent. or ten per cent. of dyed rayon, say a blue-grey shade, a fast colour, vat dyed, and that the wool constituent of the yarn is undyed. When he has woven his pieces he can, if he wishes, stock these with little risk, knowing that in them he has goods which can very quickly be dyed up to any shade required, and that the results will be practically equal to high-class mixture fabrics. They can be dyed a range of shades, and with the blended rayon these will produce delightful mixture effects which cannot readily be distinguished from genuine botany mixtures.

The combed top is very frequently supplied to the manufacturer or spinner in undyed state. This is blended in small proportions with white wool, so that when the yarn or fabric is dyed subsequently the rayon remains

white. A large quantity of the combed rayon is used in this way, some of it going into the hosiery and knit goods trade, and some to the manufacturer of woven goods.

Present-day tendencies undoubtedly point to an extensive use of staple fibre yarn—both all-rayon staple yarn and union yarn of blended rayon and wool staple—in the manufacture of dress goods. Continued experiment in the production of fabrics of this type is resulting in the manufacture of numerous excellent new cloths. These exhibit novelty features which must assuredly win them a favoured place among dress materials. Already two or three fabrics going under registered names, have been taken up by the public, and are commanding a good sale. These are in plain weave, also in poplin and satin weaves. So delightfully soft to the touch are some of the staple fibre fabrics that there is little wonder at their appeal with the buyers. Among the most popular of the dress materials being sold to-day are repp cloths made from spun rayon warp crossed with four-fold botany weft. With suitable counts of the component yarns, and with a properly-balanced fabric, the combination of rayon and wool in this form seems to be ideal; consequently several makers are putting these union warp ribs on the market, and the cloths are meeting with a good demand both in the home market and overseas.

A rather serious objection to using or experimenting with rayon in the worsted manufacturing places is the "fly" or rayon fibre, which inevitably occurs, despite all precautions being taken. In a factory turning out high-class worsteds—serges, for instance—the presence of vegetable fibre in the fabric, excepting, of course, where it may be legitimately there in the form of striping threads, has scrupulously to be guarded against. Burling costs, at any time a serious item, may easily be doubled or trebled if rayon yarns are being woven in the vicinity of the worsted goods, even if in the same shed. This difficulty has certainly stood in the way of rayon's advancement in worsted areas. It has been overcome most readily with the larger firms, where it has been possible to isolate the work altogether, the rayon and wool sections of the business being kept distinctly separate from one another.

The future of the rayon and wool industries rests still very largely with research. Fibre for fibre wool is a long way ahead of rayon. Lost ground may well easily be recovered through changes in fashion's whims. Improvement in rayon has, however, gone on so rapidly; quality, regularity, strength and durability all having been so wonderfully changed in a relatively short space of time, that further developments of rayon will certainly mean the fibre's still greater hold of sections of the wool trade, further displacement of wool and allied fibres, and greater security for the fibre commercially. The lowering of wool values which has been a characteristic of recent times is undoubtedly, to some extent, a result of rayon's influence in the world. A balance is in this way being reached, which, unless some considerable improvement takes place in connection with rayon, in particular with respect to its durability and its low heat-retaining value, will tend to restrict rayon's too rapid advance, and may bring about reaction against it. Prices of both rayon and wool have fallen in recent years. That of the former will

(Continued on page 185.)

Index Numbers of Textile Fibre Prices

COMPILED BY THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

Market and Quality (Average: 1929 = 100.)	Monthly Averages.													
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	*February.
Cotton—	1929.											1930.		
New Orleans: Middling (18.58 cents. per lb.) . . .	103	102	108	104	101	101	101	100	99	97	93	92	90	81
Alexandria: Sakell, f.g.f. (32½ Talaris per kantar)	114	110	113	109	102	98	98	100	101	92	84	82	82	81
Bombay: M.g. Broach, f.g. (339½ rupees p. 784 lb.)	105	105	109	103	98	98	95	99	101	100	95	93	88	80
Liverpool: Middling (10.28 pence per lb.)	103	101	107	103	99	100	101	101	100	98	94	92	91	84
Liverpool: Sakellar, f.g.f. (17.06 pence per lb.) . . .	112	106	112	109	103	98	98	98	101	93	88	83	85	80
Liverpool: M.g. Broach, f.g. (8.37 pence per lb.) .	105	103	111	104	99	101	101	100	100	98	90	89	84	74
Flax, Hemp, Jute—														
London: Flax, "Riga ZK" (£75-9 per l. ton)	121	119	119	115	107	104	96	90	88	83	79	78	77	71
London: "Manila" \$37-0 per l. ton)	106	96	100	101	100	103	104	104	99	96	93	97	94	87
London: Jute "First Marks" (£34-0 per l. ton) ..	107	111	111	105	98	94	94	98	99	95	91	93	91	90

* First two weeks.

(Continued from page 184.)
 never again return to any of its previous levels, whereas it is conceivable that wool might again attain to one or other of its past peak heights. This being the case, rayon must continue to exert a controlling influence both on

prices and on consumption, hence with continued improvement and at the same time increasing supplies, it would seem that the future of the wool industry is going to be determined in no small degree by the future developments in connection with rayon.

FELDMÜHLE Limited, RORSCHACH

SWITZERLAND

RAYON (Artificial Silk) SPINNERS

(Viscose)

OUR MOTTO IS — "QUALITY BEFORE QUANTITY."

We supply Bleached, Dyed and Sized Rayon in Hanks or wound on Cones, Cheeses or Pirns for knitting and weaving trades.

All kinds of Special Twists kept in stock or made to clients' samples at lowest prices. Special requirements of customers carefully and promptly dealt with.

Delivery—Always prompt from stock in Switzerland.

Prices—Our offers will convince you that you cannot buy a better yarn at a lower price.

Write and ask a Representative to call upon you or to submit samples and quotation against your specific requirements.



Registered
Single
Yarns.

AUSTRALIAN FACTORY REPRESENTATIVES:
(excluding West Australia)

Messrs. F. PIERRE COUVE LTD., 165-167 Castlereagh St., SYDNEY

West Australian Representatives:

Messrs. BROWN & DUREAU LTD., 312-314 Murray St., PERTH

Our unique Technical Knowledge is always at the service of our customers.



Registered
Twisted
Yarns.

Paris Openings

By Katrine Hooper.

Agnes.

With the increasing length of skirt, there comes the larger hat; in some cases as large as the old-fashioned. The crown is always as close fitting as possible, often so shallow that the brim which is set high up gives the impression that it is all in one piece.

There is also a return of flowers and ribbons, but flat and emphasising the line.

The smaller hats are still off the face and long in back, although not so exaggerated as last year.

While the fabric for the most part is of straw, there is a strong development of cotton and linen.

Chantal.

The collection shows great favour towards the rough weaves in silks and wools—tussore, ondamousa and various grains in the heavier weaves are used in intricate cuts to show movement in the swing of the skirts. There is one lovely golden beige moire afternoon costume. Skirt lengths are about six inches over the knee for afternoon and sport, and much longer for evening. Clear green, with a yellow tone, is the outstanding highlight in colour. But the paler chartreuse is also represented. Brilliant red, almost the shade of a ripe tomato, is used both for day time and evening.

Black is also important, especially in the satin. One black and white tweed print is relieved by a very pale lemon yellow blouse and lining to the jacket.

The tweeds are interesting, very light weight and rather subdued.

The evening dress harks back to the Greek for inspiration.

The prints have an entirely new character. The old-fashioned flower garden has gone by, and has given way to a much more stylised type with the modernistic feeling recognised in the colouring and simplicity. One vivid red and blue was reminiscent of the paisley shawl, and was used as dress and lining under a long navy coat. Navy, by the way, seems to be of interest. There was one polka dot in this colour.

Jane Regny.

The collection was very wearable from the sports point of view—not so good for afternoon and evening. Shantung, tussore, and the rough weaves were distinctly in favour both for sports and for dresses to wear under long coats. The crepes used are a more pebbled weave and heavier than in the past season. This is necessary partly because of the intricate seaming and necessity for a becoming swing to the costume,

The important feature of all the fabric is its suppleness, This is essential.

There is a definite concession to the interest of linen in the little sleeveless sports jackets, which were all lined with this fabric and worn so that they could be turned either side out.

The jersey cravat that Jane Regny is launching should be very good. It will be interesting to see whether this can be produced in a large enough quantity to affect the market.

The sports dresses and blouses from men's necktie silk

are very smart. They are developed in monotone small jacquard designs. The herring bone should be very good. But again the important quality of this silk will be its flexibility.

There was one oilcloth beach coat.

The blouse was an important feature throughout, from the men's shirting sports through to the soft muslin ruffled wisp that was reminiscent of the pre-war days.

There was one sports dress in a crepe that looked as though it were an end and end random dyed.

One of the best prints was the Corail—black with red coral branches, very clear cut. Weaves, especially the small jacquards, were much more to the front than prints.

From Jane Regny's Collection Notes.—Simple and practical; the waist is in its normal place, the bust more clearly defined and the skirt of the same length but fuller than last season.

Sports Costumes.—"Tres sport"; a few short bolero jackets, others with basques, all very youthful.

Coats.—Sports coats, comfortable and practical. Simple coats for the afternoon.

Fabrics.—Few tweeds; a marked revival of plain materials, some in pastel or mother-of-pearl shades. Self colour harmonies, and a few tone contrasts.

Shades.—Buddha and the whole gamut of this warm shade, worn by many Buddhists in India and very becoming to sunburned complexions (Danse de Feuilles).

Navy in its various shades is often repeated.

Pink Pastel Rose, Packard (sweater), Surnburn, Bilitis. Green Prairial, Garde-Chasse, Pastel Vert, Petale Perdu. Blue Blue Boy, Pastel Blue, Premiere Valse, Turquoise. Paillasse or String, which are always charming.

A great many white dresses for tennis and the seaside; a few models in grey or black, some in beige and various shades of tobacco.

Maggy Rouff.

The opening was well attended by the buyers. Strong emphasis was placed on the heavy, coarsely-woven silks for day time and sport instead of the crepe de chine type. Marocain, shantung were other variations of these weaves shown. This is the logical outcome of a mode that is longer, more complicated in cut, and more fitted to the figure. Some of the shantung was woven with black and white flecks on a coloured ground. In one instance, olive green was chosen as a ground colour, and was very smart. Necktie silk also was shown.

A few heavy tweeds were shown. But in general, the woollens were more smoothly woven and flexible—in fact, were treated more like silk. The rough tweeds were smart for sports and travel. Three suits were shown that were made of cotton and not linen. One was a sports dress of white rep, with a short Scotch plaid wool jacket. Another was a cotton fabric that appeared to be white drill like a sailor suit. The third was a blue pique.

Blouses were strongly in evidence; the little lingerie blouses were particularly attractive. They were usually in white handkerchief cloth, although some were in pale pink and blue, and one was an all-over eyelet embroidery battiste.

Plain colour or an almost monotone mixture was the predominating note for day time. Printed chiffons were

for formal afternoon and evening. The ensemble of the little matching coat or wrap was used throughout.

The designs were very interesting, quite large and chosen to give an all-over effect. There was one particularly interesting pumpkin yellow evening gown, with a large border design printed on it of black lace—probably photographic.

While the models all gave the effect of slimness, some of them must have been six yards around at the hem.

Blue in all shades was the most interesting colour. The periwinkle and a rather brilliant, almost voiline shade, attracted attention.

Yellow was also encouraged, but in a shade that almost touched orange. This colour also appeared, but rather toned down from last year.

Red was a brilliant lacquer note.

But, on the whole, the collection favoured the white or the light pastels. Black was very prominent.

Of course, lingerie touches were very important. Some were of the old-fashioned hamburg embroidery type.

Schiaparelli.

The collection is one of the few that is emphasising the rough, loose-woven tweeds. Very interesting models have been developed, and in design that will appeal strongly to the public. The coats are both the short jacket and the three-quarter. Where the long coat is shown, it is more for the purpose of that extra wrap which is so necessary.

But the interesting part lies in the cuts of the collars and the shoulders, which are all quite out of the ordinary.

Shantung and rough crepe are the important silk weaves for dresses and blouses. But one blouse was shown in blue lawn, with discharge polka dots. The lin-

gerie blouse was not so much in evidence here. But that is natural. The lingerie blouse has its definite place with the more formal type of suit.

For colour, a brown peachy beige makes a very strong appeal. In one instance, it was shown with a shantung blouse of clear yellowish green with touches of orange.

Orange and brick, also a sunburnt yellow, are all given a place. One feels a tendency towards a light, clear range of colour.

For formal wear, black satin antique is strongly emphasised, and always relieved with dead white, never a colour. Some attention is paid to navy blue.

Among the bathing costumes is a pyjama made of a dish towelling—white with a blue bar. It is shown over a jersey multicoloured bathing suit of such a rough weave that it almost suggests towelling.

Another beach costume is of rubberised terry cloth wrapped into a skirt like the Indian sari.

Paul Poiret.

This house is living up to its reputation of showing a collection that is vibrant with colour and interest. Of course, the present mode gives it a chance to use imagination and line.

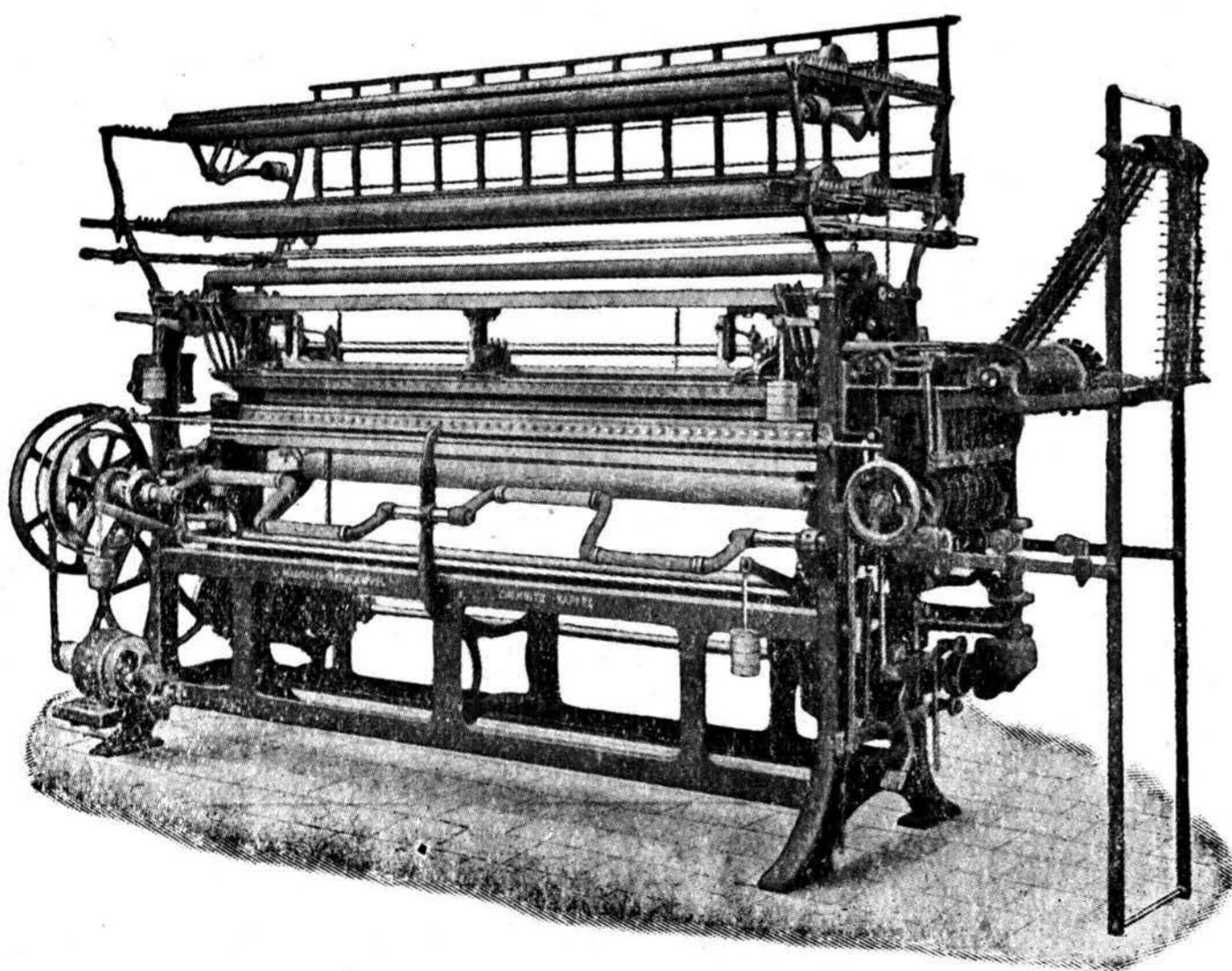
The models are designed much more for the private clientele than for the general buyers. In fact, many of them would be rather hard to wear.

Less black is shown than at the other collections. Beige is very strong, both in the yellow tones, but also in the brownish peach. Blue is also given emphasis.

There is a great deal of interesting embroidery in brilliant colours. Also many lingerie touches.

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Elasticity and Strength of Rayon Yarns

The properties of strength and elasticity of rayon yarns for knitting and weaving, in some comparisons which have recently been made in a series of tests carried out by the Textile School of the North Carolina State College, are indicated herein:—

Breaking Strength.

The yarns selected for this test were samples of commercial yarns sold in 1928, and were all of the 150 den. size. High breaking strength is not an all-important property of a rayon yarn. All types of rayon have sufficient strength when dry. It is more important that the yarn retain its strength and durability when subjected to moisture.

Charts show the bone-dry breaking strengths of each of the types. Nitrocellulose is stronger in a bone-dry state with an average breaking strength of 67.9 lb. Cuprammonium ranks second at 49.8 lb., viscose third at 47.5 lb., and acetate fourth at 34.3 lb. Each type shows a marked decrease with each increment of water. In a saturated condition cuprammonium leads in strength with a break of 24.3 lb., acetate comes second with 16.4 lb., and nitrocellulose and viscose each break at 14.8 lb.

Percentage Basis.

When losses in strength are reduced to a percentage basis, yarns rank as follows:—Cuprammonium, 51 per cent.; acetate, 52 per cent.; viscose, 69 per cent., and nitro-cellulose, 78 per cent.

These figures go to show that the cuprammonium and acetate yarns retain a higher percentage of the dry strength when moistened than do the other yarns.

Elasticity.

Another property of great importance in yarns for weaving and knitting, whether of natural or artificial origin, is that of elasticity. Not only does this quality add greatly to the comfort and service of the fabric when made into a garment, but it is an important factor in the processes of beaming and weaving, and also in knitting.

Elasticity has been defined as the maximum recoverable stretch of a strand of yarn. It has been measured in some instances on a percentage basis, but in these experiments elasticity has been determined from the elastic limit as indicated in the stress-strain curves. The elastic limit signifies in this case the minimum force necessary permanently to elongate the strand or group of strands. It is obtained by marking the break in the stress-strain curve and reading on the lower scale the force in pounds which was being applied at the yield point.

Elastic Limits Important.

High elastic limits are of greater importance in a rayon thread than percentage elasticity, because it is highly necessary that yarn should resist tension, since permanent elongation gives the thread a different reflecting power and forms a defective fabric.

Summarising the results of the elasticity tests, it may be said that cuprammonium rayon has an elastic limit of 45.8 lb. in the bone-dry state, nitro-cellulose 33.5 lb., viscose 31.7, and acetate 22 lb. for 80 strands. The charts show the rate of decrease in elastic limit with the addition of moisture.

In the wet stage all yarns except acetate have practically no elasticity. Any stretching in this condition is permanent stretch. Acetate rayon, however, retains a part of its elastic property, as shown by the fact that 5.5 lb. of force are applied before the 80 strands are stretched beyond their elastic limits.

Elongation.

Elongation refers to the total amount of stretch that is necessary to break the strands. It includes both recoverable stretch (elasticity) and irrecoverable stretch. It is to some extent a measure of the plasticity and hardness of a thread, since a thread which is highly plastic in character will require a greater elongation to break or sever it, while one which is hard will resist the pulling force and break with little attenuation or elongation.

On this assumption the elongation tests show two extremes in plasticity. Acetate rayon, with an elongation of 27.3 per cent. in the dry state, is highly plastic, while cuprammonium, with 4 per cent. elongation, is extremely hard. Nitro-cellulose and viscose occupy an intermediate position in the scale of plasticity, with an elongation of 17.2 per cent. of nitro-cellulose and 13.7 per cent. of viscose.

Moisture Increases Elongation.

With the addition of moisture, the elongation has a tendency to increase in all yarns except nitro-cellulose, which has a trend downward. Acetate rayon rises from 27.3 per cent. to 39.3 per cent. in passing from the dry to the wet state. Cuprammonium rises from 4 per cent. to 27.2 per cent. Viscose rises from 13.7 per cent. to 31.8 per cent., while nitro-cellulose decreases from 17.2 per cent. to 15.5 per cent., with the approach of the saturation point.

The conclusions drawn as a result of these tests are as follows:—

(1) Nitro-cellulose rayon is the strongest of all types of rayon in the bone-dry state, but loses the highest percentage of its strength on being wet. Its elastic limit is exceeded only by cuprammonium in the dry state and acetate in the wet state. The elongation of nitro-cellulose decreases with the addition of moisture.

(2) Cuprammonium rayon possesses next to the highest breaking strength when dry, the highest elastic limit in all stages of wetness, and the highest strength when wet. It has the lowest elongation when dry and is the least plastic of all.

(3) Acetate rayon has the lowest breaking strength of all in the bone-dry state, and is next to the highest in strength when wet. It has the lowest elastic limit when dry and the highest when wet. It possesses the highest elongation at all times, regardless of moisture. It is the most plastic, but is less likely to be permanently stretched when wet.

(4) Viscose occupies an intermediate position in respect to strength, elasticity, and elongation.—“Textile American.”

A UNIQUE EXHIBITION.

An Indian correspondent offers to exhibit our “manufacturers” at an Indian fair. We know a few who would draw a good crowd, but, with their characteristic modesty, they have declined the invitation.

Pruning the Plant Pay-Roll

(Continued from page 174.)

serve as a practical guide. Naturally, a close watch should be kept for sections where a worker may be pared down without sacrifice of quality of product or cleanliness of the room.

In any scheme of labour cost control in which machinery plays a part, it must always be patent that the speed of the machinery is a vital factor. Given a set of conditions and everything else being equal, the highest speed consistent with good work and reasonable wear and tear on the machinery will bring about a minimum of labour cost.

Now Figure the Efficiency.

Having ascertained that speed which apparently is the highest that can be run to best advantage, the percentage of efficiency of production should be determined. Always it should be as near the 100 per cent. mark as can reasonably be got to. Important in the reaching of peak production week in and week out is that of stopping of machinery during running hours, whether legitimate or otherwise. Every stoppage should be analysed, and unnecessary stops eliminated and legitimate ones reduced to a minimum. Deliberate stopping of machines by unscrupulous workers should be dealt with in a firm manner, the penalty being that which best meets local conditions.

Another significant element in bringing about major

productions, and thus reducing labour cost, is the matter of keeping the machinery in good repair at all times. Needless, or premature, deterioration should be rigidly looked into and the necessary steps taken to correct same, but in all cases keep the machines in tip-top shape.

As with the machines, so also with the workers—they must be efficient. Not only should they be expert at their duties, but they must also be pliable, ready to comply with whatever requests may be made of them relative to their work. In short, discipline must be excellent.

Incompetents—there should be none where selective hiring can be done; incompetents should be weeded out at the earliest opportunity. An incompetent worker is like a bad spark plug in an auto. The organisation may get along all right for a while, but eventually trouble is bound to happen.

See That Learners Really Learn.

Coming back for a moment again to learners. Stress should be placed on the matter of teaching all beginners in a thorough fashion. They are the future foundation of the firm, and consequently require the most exacting attention, so that they will acquire the requisite degree of expertness to handle the work proficiently and understandingly.

—“Cotton.”

The negotiations which have been taking place between Drapery Trust Ltd. and Paulden, the big Manchester stores, have been completed. It is learned in Manchester officially that Paulden's have been acquired by the Drapery Trust.

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Financial Review

Specially written by this Journal by "A Stockbroker."

The outstanding features in local Stock Exchange circles during the first week in May have been the ever-increasing demand for Commonwealth securities, with supplies being especially lacking in volume, and a further drastic writing down in general investments.

The extent of the demand for Commonwealth Loans is amply demonstrated when it is stated that, as compared with prices ruling last week, the 5½ per cent. 1936's and 1941's are now quoted at upwards of £1 per cent. higher.

In respect of short-dated loans, the demand has been particularly keen, due largely to the fact that overseas interests are becoming more than ever interested in these securities, by reason that they are either unable to secure overseas cover or are not prepared to pay the existing high rates for T.T.

Developments in this section of the market during the past week put a slightly different complexion on the probable terms of the new internal Commonwealth Loan, the terms of which are expected to be announced this month.

It is to be somewhat regretted that the Loan Council per force will have to enter the local market in the near future for its requirements of about £7,000,000, as not only will this tend to disturb the recovery in the gilt-edged section, but will probably have a further adverse influence on trading and commerce, and will absorb once again floating supplies of money.

Special reference has been made in the press of the visit of Mr. Fenton (Minister for Trade and Customs), accompanied by Mr. J. R. Collins, the Financial Adviser of the Commonwealth in London, to New York, and as these two gentlemen are to confer with banking interests, there is little doubt that these representatives of the Commonwealth will endeavour to test out the possibilities of the New York market for a Commonwealth loan.

Latest cabled advices from America state that the Wall street market is at present flooded with foreign bond issues, and, furthermore, latest quotations received of existing Commonwealth and State securities listed in America are anything but encouraging. It would appear that the Commonwealth will have to pay fairly dearly for its requirements should it decide to enter the New York market in the near future. Another factor that is overshadowing the gilt-edged section of the market at this juncture is the possibility of a 75,000,000-dollar loan for the International Bank.

A further reduction in the Bank of England rediscount rate has immediately been reflected in a sharp advance in almost all gilt-edged securities, although, unfortunately, external Australian loans have not shared to any extent in this upward tendency. The London industrial market is, however, dull.

The tone of money rates for Australian local bodies is, if anything, slightly easier than a few weeks ago, not only by reason of the firming in Commonwealth Bonds, but also due to the fact that the demands of such bodies are not as insistent as in the immediate past.

Wool Market Review

(Continued from page 154.)

play a very important part in production, and it remains to be proved whether local experiments are to succeed or not. Taking into account the "cut per head" of these animals (say an average of 10 ounces) it would be assumed that farming would need to be carried out on a fairly large scale to produce payable results, while as yet there are marketing difficulties to be overcome, in regard to which we would like to hear something from interested manufacturers, either in England or France, where the chief spinners of this Angora wool are located.

Average prices realised for greasy wool, per lb., from July 1, 1929, to March 31, 1930:—

Victoria	10.68d.
New South Wales	10.53d.
Queensland	10.76d.
South Australia	8.51d.
West Australia	10.31d.
Tasmania	12.24d.
All centres	10.41d.

Percentage of Merino to Crossbred.

	From July 1, 1929, to Jan. 31, 1930.		Season 1928/29.	
	Merino. Per cent.	Crossbred. Per cent.	Merino. Per cent.	Crossbred. Per cent.
New South Wales	90	10	89	11
Queensland	99½	½	100	—
Melbourne	44¼	55¾	—	—
Geelong	58¼	41¾	57	43
Albury	48½	41½	—	—
Adelaide	92	8	96	4
West Australia	95	5	98	2
Tasmania	7½	92½	23	77
	78¼	21¾	82	18

RUSSIAN COTTON INDUSTRY: NEW PLAN OF WORK.

The five-year plan of the textile industry is outlined in the latest issue of the "Economic Review of the Soviet Union." The plan provides for increasing textile production 134 per cent. by 1932-33 (fiscal year ends September 30), as compared with 1927-28, with the largest proportionate gains indicated for branches which use native raw materials, linen, hemp and silk. Actual sales for 1928-29 were 16.4 per cent. above 1927-28. Construction of 42 spinning mills, 42 weaving mills and seven finishing plants is called for in the cotton section, together with modernisation of old units. Most mills are run on three shifts, and quality is not very good at present, due to new help and reorganisation. Active stimulation of cotton-growing is sought, and State plantations, irrigation projects, and the principle of collectivism in small-scale operation are among the measures which the U.S.S.R. hopes will eventually do away with the necessity for importation of cotton.

CANADA
1925 Census

381 Mills.

Capital Employed	\$157,204,885
Number of Employees	42,879
Gross Value of Products	\$157,180,163

Canada manufactures approximately 62 per cent. of her consumption of cotton goods, 88 per cent. of knitted goods, 30 per cent. of woollen and worsted cloth, and 40 per cent. of silk goods consumed in the Dominion.

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See "Rayon."

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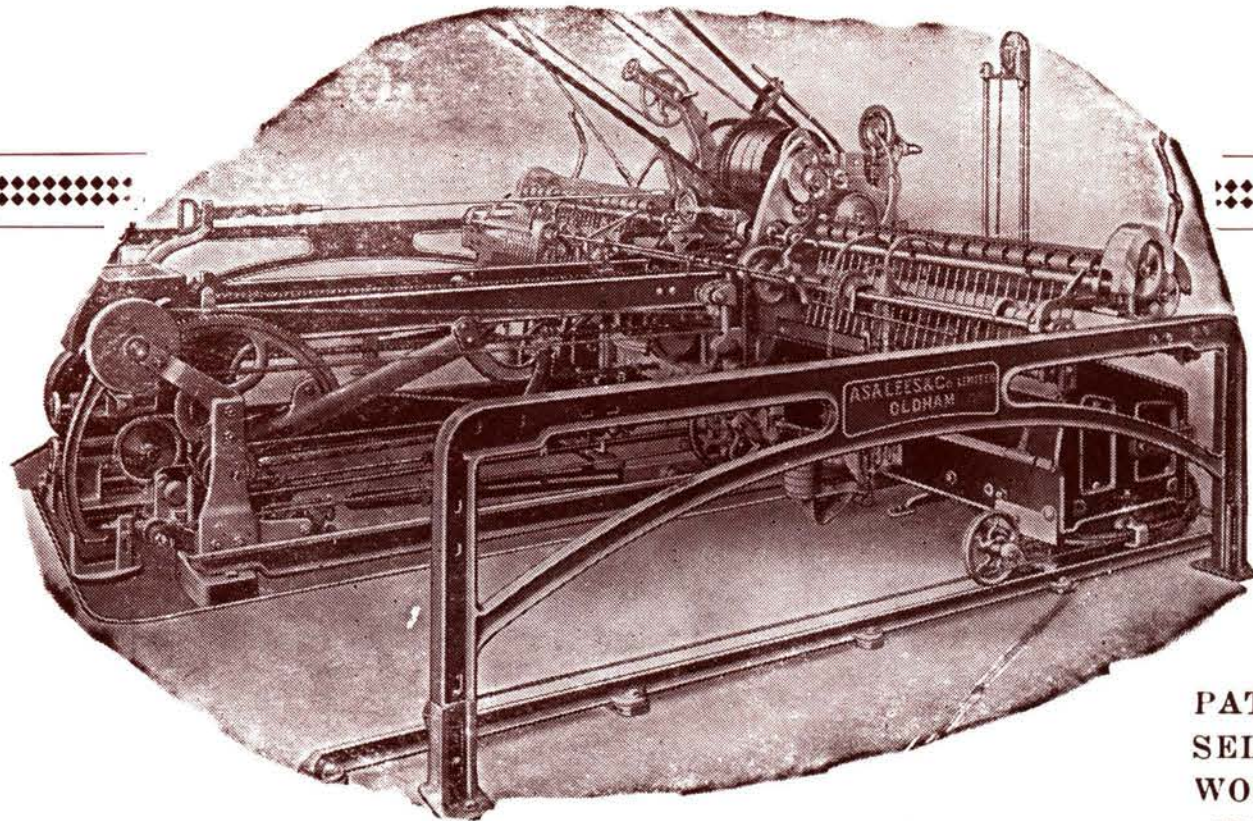
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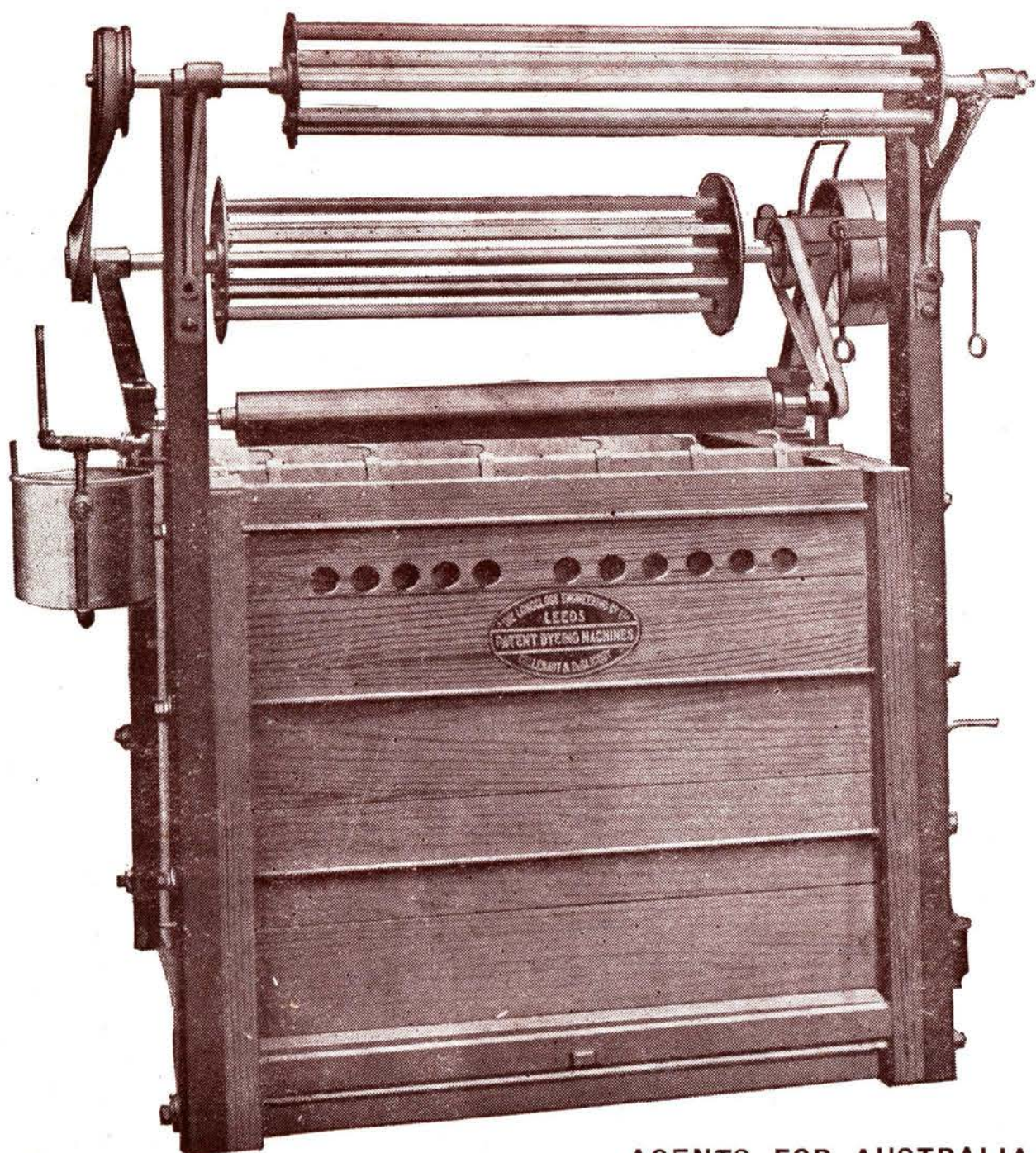
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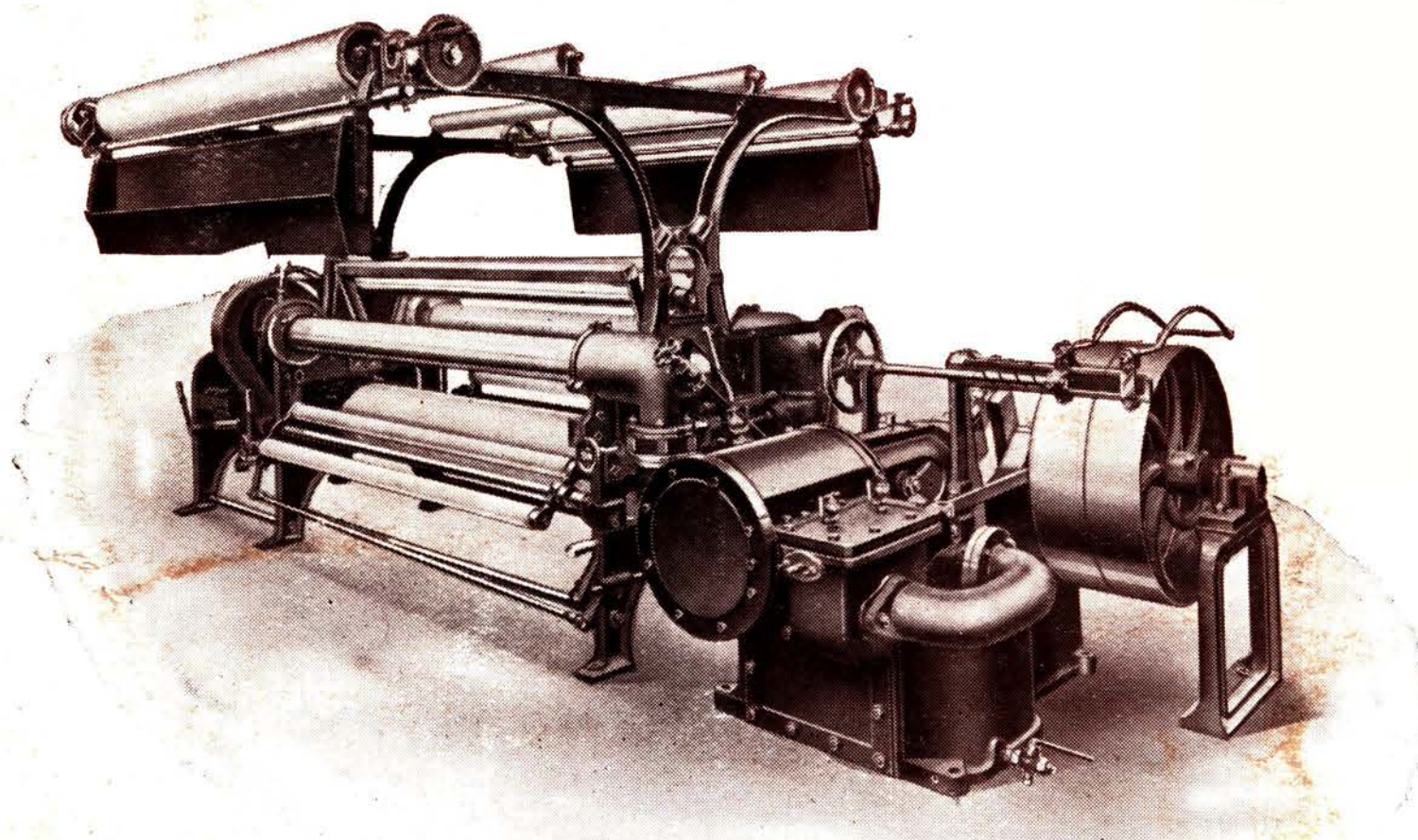
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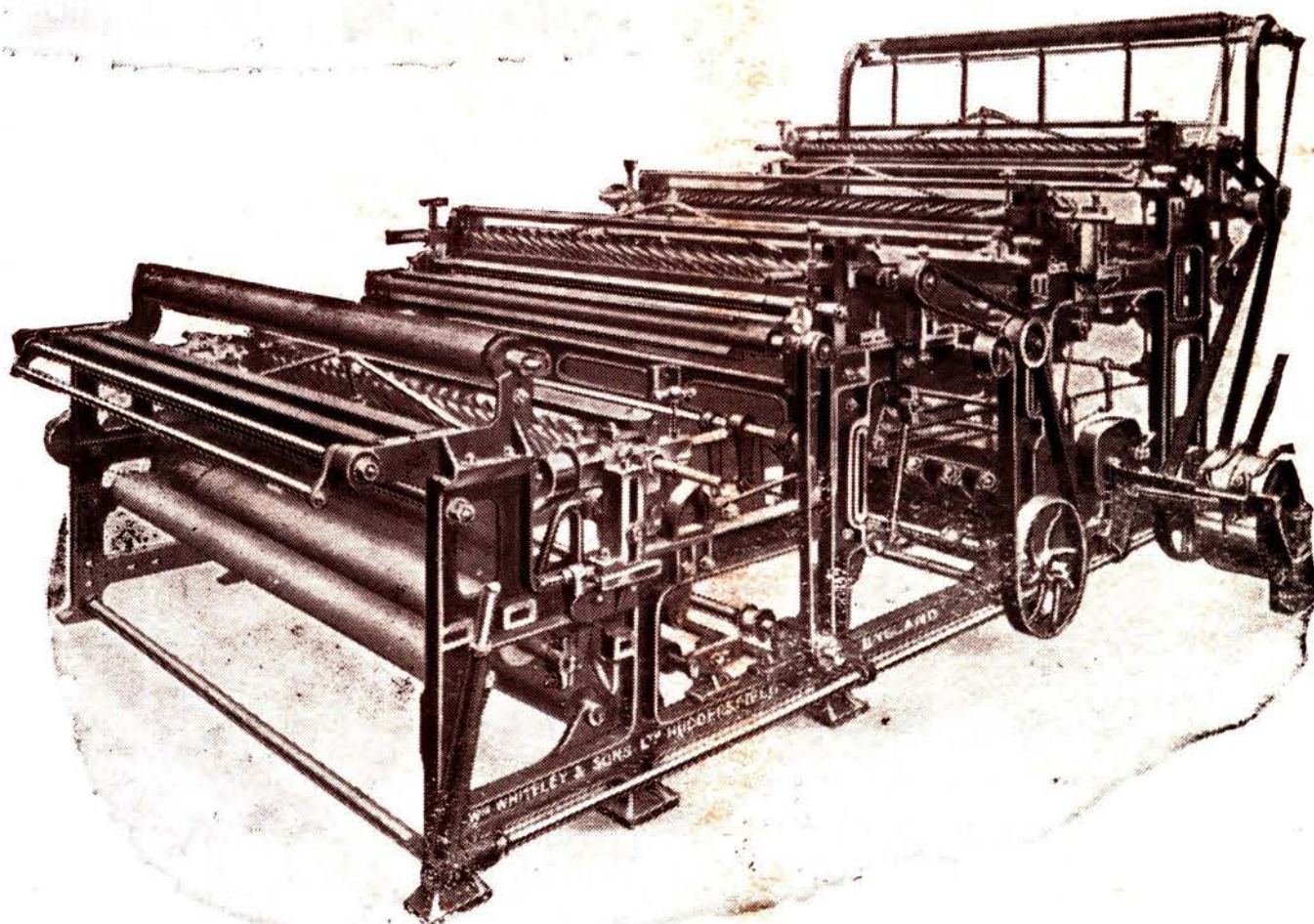
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