

FARMING
EQUIPMENT
4



"First in Grassland Farming"

NEW HOLLAND

in Australia

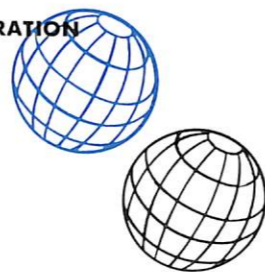


"First in Grassland Farming"



In such rolling pasture lands as these lies the inherent wealth of Australian agriculture.

SPERRY RAND CORPORATION



NEW HOLLAND

IS A DIVISION OF

SPERRY RAND

C O R P O R A T I O N

Established at New Holland, Pennsylvania (U.S.A.), in the heart of the Lancaster County in 1895, the New Holland Machine Company (Division of Sperry Rand Corporation) was originally founded by local farmers to serve the rich local agricultural market. Since then New Holland has grown considerably both in U.S.A. and abroad, until now it is one of the largest organisations of its kind in the world. In 1946 New Holland products were first sold in Australia. Today, New Holland (Australasia) Pty. Ltd. has a large factory at Dandenong, Victoria, from which comes the most complete range of precision-engineered, capacity-matched fodder conservation machinery ever to be marketed in Australia.

SPERRY RAND

30 ROCKEFELLER PLAZA, NEW YORK 20, N.Y.

SPERRY GROUP

Instrumentation, Controls, and Systems

FORD INSTRUMENT COMPANY DIVISION OF SPERRY RAND CORPORATION, *Long Island City, New York*

Missile Development Division, *Long Island City, New York*

Nuclear Development Division, *Long Island City, New York*

SPERRY ELECTRONIC TUBE DIVISION OF SPERRY RAND CORPORATION, *Gainesville, Florida*

SPERRY FARRAGUT COMPANY DIVISION OF SPERRY RAND CORPORATION, *Bristol, Tennessee*

SPERRY GYROSCOPE COMPANY OF CANADA LTD., *Montreal, Quebec, Canada*

Sperry Gyroscope Ottawa Ltd., *Ottawa, Ontario, Canada*

SPERRY GYROSCOPE COMPANY DIVISION OF SPERRY RAND CORPORATION, *Great Neck, New York*

Aeronautical Equipment Division, *Great Neck, New York*

Air Armament Division, *Great Neck, New York*

Countermeasures Division, *Great Neck, New York*

Electronic Tube Division, *Great Neck, New York*

Field Engineering and Repair Division, *Great Neck, New York*

Marine Division, *Roosevelt Field, Garden City, New York*

Microwave Electronics Division, *Great Neck, New York*

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SPERRY MICROWAVE ELECTRONICS COMPANY DIVISION OF SPERRY RAND CORPORATION, *Clearwater, Florida*

SPERRY PHOENIX COMPANY DIVISION OF SPERRY RAND CORPORATION, *Phoenix, Arizona*

SPERRY PIEDMONT COMPANY DIVISION OF SPERRY RAND CORPORATION, *Charlottesville, Virginia*

SPERRY SEMICONDUCTOR DIVISION OF SPERRY RAND CORPORATION, *South Norwalk, Connecticut*

SPERRY UTAH ENGINEERING LABORATORY DIVISION OF SPERRY RAND CORPORATION, *Salt Lake City, Utah*

THE SPERRY GYROSCOPE COMPANY LTD., *Brentford, London, England*

Hydraulics, Machinery, and Electrical Apparatus

VICKERS INCORPORATED, *Detroit 32, Michigan*

Aero Hydraulics Division, *Detroit, Michigan; Joplin, Missouri; Jackson, Mississippi; Torrance, California*

Electric Products Division, *St. Louis, Missouri*

International Division, *Detroit, Michigan*

Vickers Hydraulik, G.m.b.H., *Bad Homburg, Germany*

Vickers-Sperry of Canada Ltd., *Toronto, Ontario, Canada*

*Vickers-Detroit Hydraulics Pty. Ltd., *Maribyrnong, Victoria, Australia*

*Stein Atkinson Vickers Hydraulics Ltd., *London, England*

Machinery Hydraulics Division, *Detroit, Michigan; Waterbury, Connecticut; Omaha, Nebraska*

Mobile Hydraulics Division, *Detroit, Michigan; Joplin, Missouri*

Tulsa Winch Division, *Tulsa, Oklahoma*

WHEELER ELECTRONIC CORPORATION, *Waterbury, Connecticut*

WRIGHT MACHINERY COMPANY DIVISION OF SPERRY RAND CORPORATION, *Durham, North Carolina*

* Associated Companies

CORPORATION

Farm Equipment

NEW HOLLAND MACHINE COMPANY DIVISION OF SPERRY RAND CORPORATION,
New Holland, Lancaster, Belleville, and Mountville, Pennsylvania.

New Holland Machine Company Ltd., *Brentford, London, England*

New Holland (Australasia) Pty. Ltd., *Dandenong, Victoria, Australia*

New Holland Machine Company (Canada) Ltd., *Brantford, Ontario, Canada*

New Holland Machine Company (France) Ltd., *Lyon, France*

REMINGTON RAND GROUP

Business Machines, Systems, and Equipment

REMINGTON RAND DIVISION OF SPERRY RAND CORPORATION, *New York, New York*

Plants at Benton Harbor, Michigan; Boston, Massachusetts;

Cobleskill, New York; Danville, Illinois; Elmira, New York;

Herkimer, New York; Holyoke, Massachusetts; Ilion, New York;

Marietta, Ohio; Middletown, Connecticut; New Brunswick, New Jersey;

Newton, New Jersey; North Tonawanda, New York; Redwood City, California;

Tonawanda, New York; Vega Alta, Puerto Rico; Williamstown, Massachusetts

Electronic Computing and Tabulating Equipment

REMINGTON RAND UNIVAC DIVISION, *New York, New York*

Plants at Elmira, New York; Ilion, New York; Philadelphia, Pennsylvania;

St. Paul, Minnesota; South Norwalk, Connecticut; Utica, New York

Electric Shavers

REMINGTON RAND ELECTRIC SHAVER DIVISION, *Bridgeport, Connecticut*

Plants at Bridgeport, Connecticut and Vega Alta, Puerto Rico

Remington Rand Products—Overseas

REMINGTON RAND INTERNATIONAL DIVISION, *New York, New York*

Plants at Buenos Aires, Argentina; Sydney, New South Wales, Australia;

Rio de Janeiro, Brazil; Hamilton, Ontario, Canada; Santiago, Chile;

Bogota and Cali, Colombia; Copenhagen, Denmark; Lyon, France;

Bellheim and Frankfurt, Germany; (Great Britain) Weybridge and Park Royal, England;

Hillington and Thornliebank, Scotland; Calcutta, India; Milan and

Naples, Italy; Tokyo, Japan; Mexico City, Mexico; 'sHertogenbosch,

Netherlands; Saarbrücken, Saar Territory; Johannesburg, South Africa;

Stockholm, Sweden.

REMINGTON RAND (AUSTRALIA) PTY. LTD., *80 Paramatta Road, Lidcombe, New South Wales, Australia*

CHARTRES LIMITED, *Remington House, Liverpool Street, Sydney, New South Wales, Australia*

SPERRY RAND CORPORATION



GEN. DOUGLAS
MacARTHUR
*Chairman of the Board;
Chairman, Remington Rand
Advisory Board.*



H. F. VICKERS
*Member, Board of Directors;
President and Chief Executive
Officer,
Sperry Rand Corporation;
Member, Sperry Advisory Board*



GEORGE C. DELP
*President and General Manager,
New Holland Machine
Company Division.*

Sperry Rand Corporation U.S.A., was formed on June 30, 1955 by the consolidation of The Sperry Corporation and Remington Rand Inc. Each of the constituent corporations still retains its divisions and subsidiaries and continues respectively as the Sperry Group and Remington Rand Group of Sperry Rand Corporation. In the United States of America and in overseas countries, the Corporation has over 70 plants and employs approximately 85,000 people.

During the formative years of the companies of the Sperry Group, two patterns of expansion were followed. One was to supply U.S.A. national defence with new and improved equipment, and the other was to provide the nation with products for purely peaceful development. Although defence production is still a vital factor in the operation of many of these companies, all of them now produce increasingly in non-defence fields. The New Holland Machine Company is entirely devoted to manufacturing grassland farming machinery, and this Division is one of the largest of its kind in the world, specialising solely in Fodder Conservation Machinery.

With the exception of war years, the companies that have gone into building the Remington Rand Group have never engaged in defence production to any large extent. Today, almost the entire extensive business of this Group is with commercial customers in all major markets of the world. Many Remington Rand products are familiar to the Australian general public as household appliances, while many more are specialised devices which are becoming increasingly in demand as a means towards improving business efficiency. The Univac (Reg.) line of electronic computers, now serving the requirements of large and small business, government, and scientific research in universities and commerce, has placed this Division in the forefront of the brand-new electronics-for-business industry.

To the major contribution which the New Holland Division has made to agricultural development and progress throughout the world . . . and to the many thousands of Australian farmers and graziers who are benefiting by the practice of fodder conservation with modern methods and machines . . . this book is respectfully dedicated by

NEW HOLLAND (AUSTRALASIA) PTY. LTD.



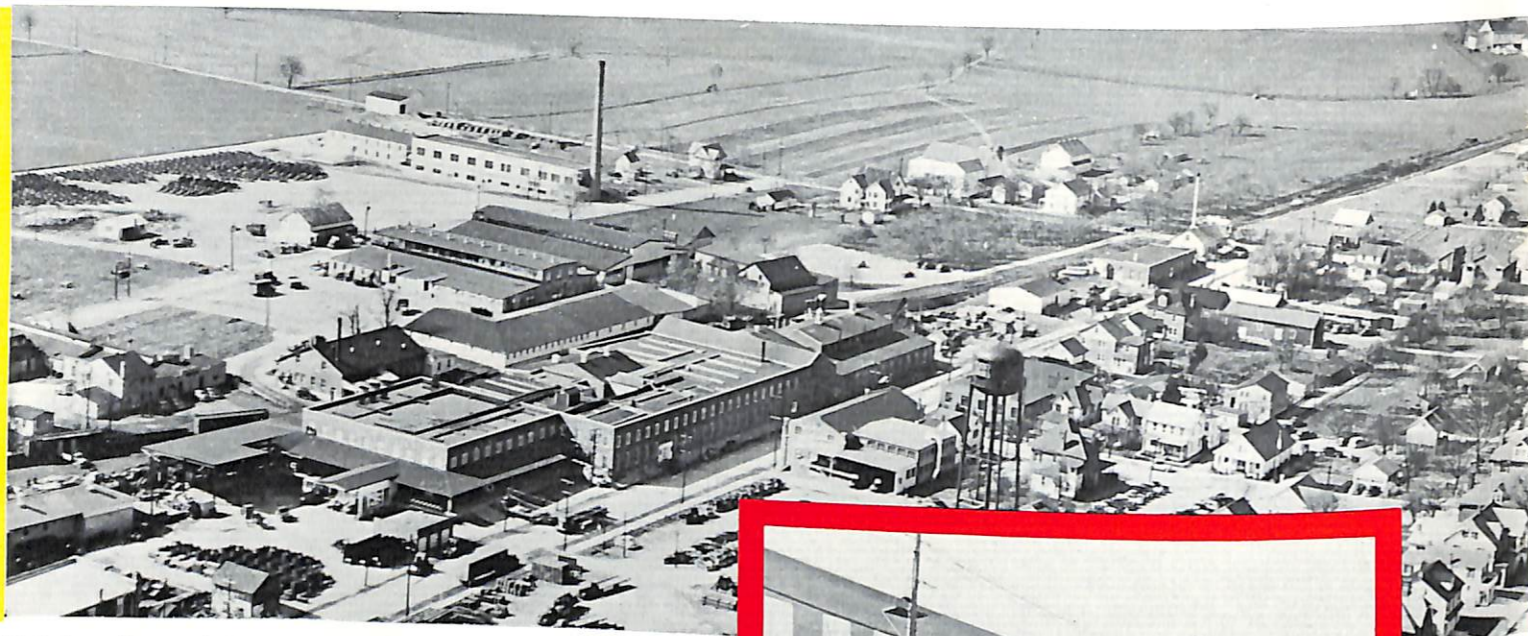
Administrative block at the Dandenong (Victoria) factory and Head Office of New Holland (Australasia) Pty. Ltd., Division of Sperry Rand Corporation, U.S.A.



On the outskirts of the City of Dandenong, one of Victoria's most progressive and thriving communities within 20 miles of Melbourne, is situated the spacious and modern plant of New Holland (Australasia) Pty. Ltd. . . . a landmark by day and by night, on the famous Princes Highway, main arterial route to the rich Latrobe Valley and Gippsland, green heart of the Victorian dairying industry.

New Holland grassland farming machinery is manufactured in

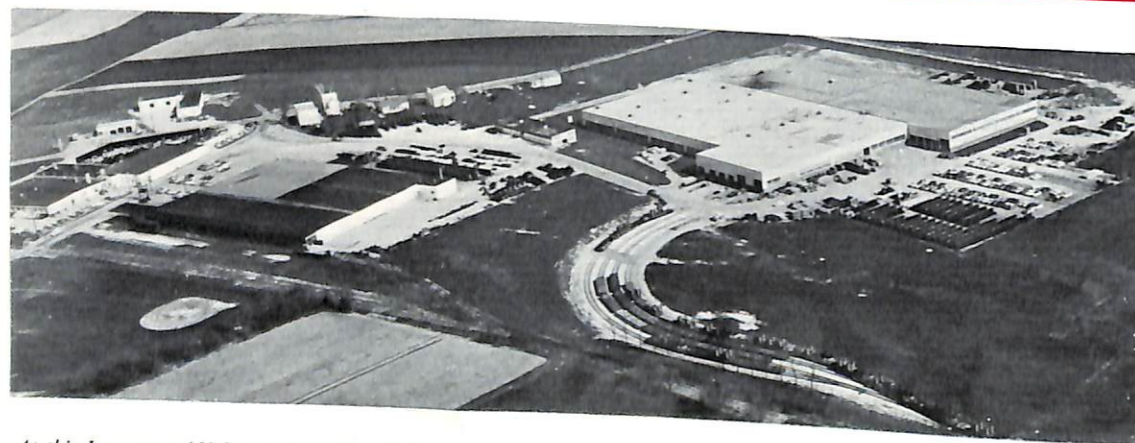
AMERICA • CANADA • ENGLAND • FRANCE



Birthplace of a vast industry . . . main administrative offices and plant of New Holland Machine Company at New Holland, Pennsylvania, U.S.A.



Close-up of main administrative block

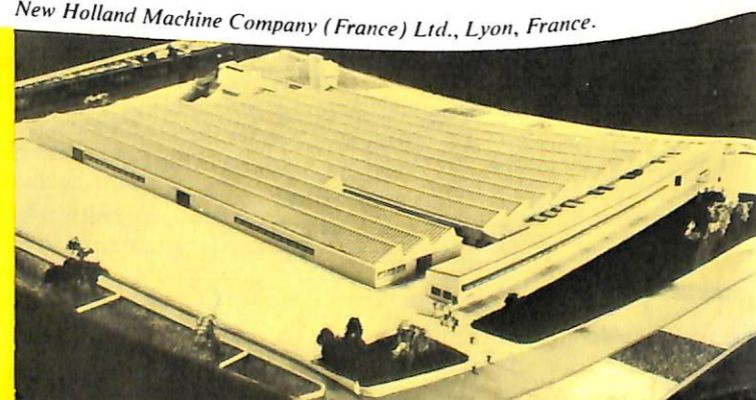


Aerial view of the extensive plant at New Holland, Pennsylvania, U.S.A.

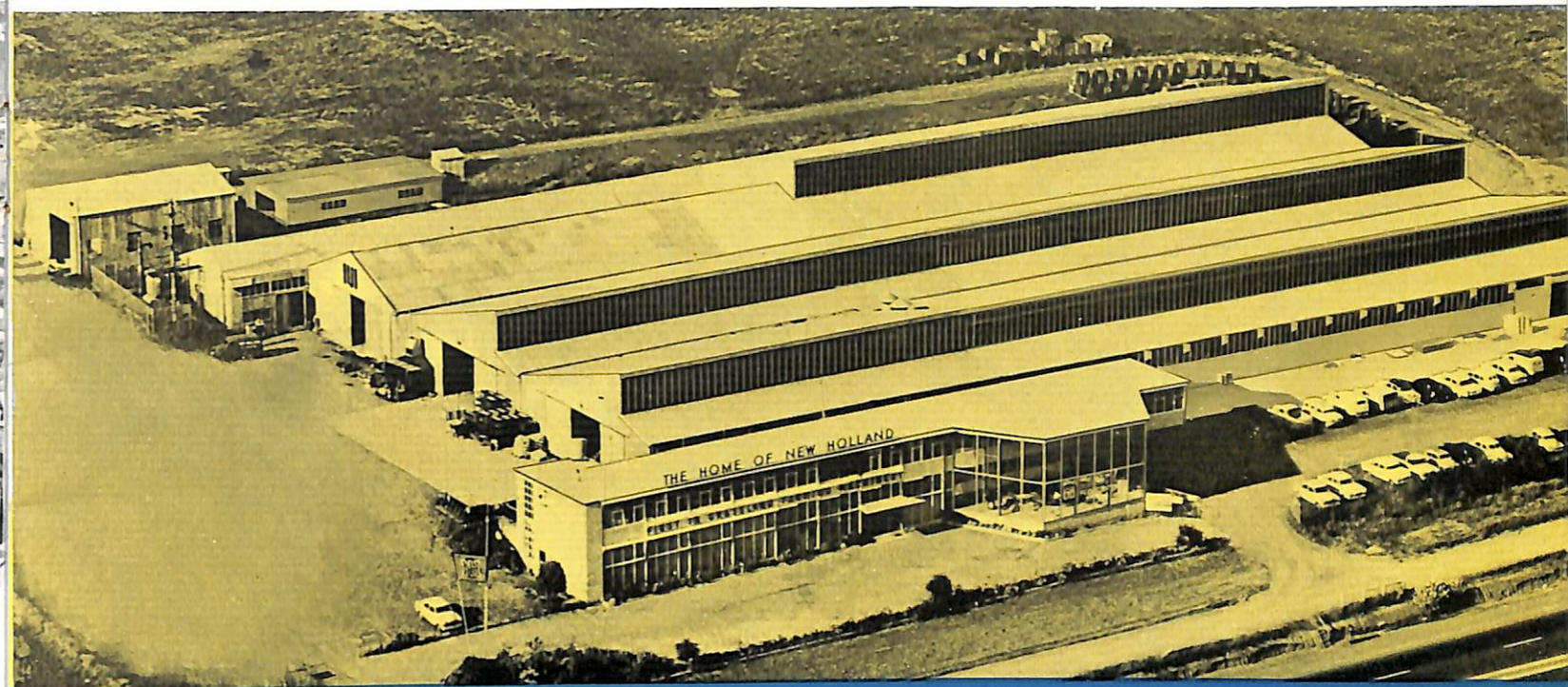
At this Lancaster (U.S.A.) plant New Holland Forage Harvesters, Blowers, etc. are produced.



New Holland Machine Company (France) Ltd., Lyon, France.



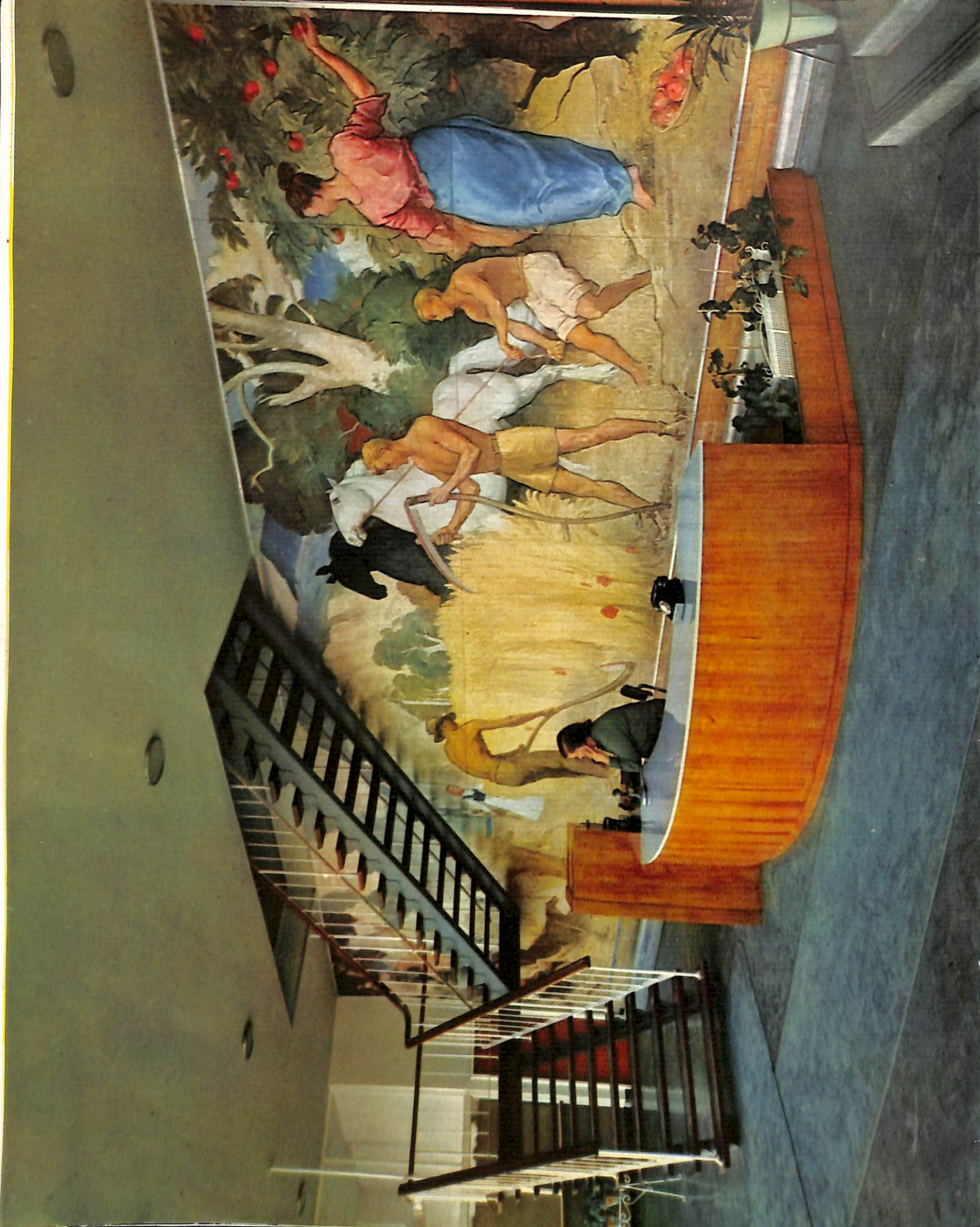
. . . and AUSTRALIA



Aerial view of the New Holland (Australasia) Pty. Ltd. factory at Dandenong, Victoria. Ample provision of vacant land will permit still greater expansion to these premises in line with current and future plans for development.

A section of the Foreign Operations Department, New Holland Machine Company, New Holland, Pa., U.S.A. Through this office the parent company maintains close and constant liaison with New Holland manufacturing centres throughout the world . . . a nerve centre which enables Australia and other countries to keep abreast of modern conservation practices and the latest in grassland farming machinery design and development.





Over 80% Australian-made components go into the wide range of New Holland machines sold in Australia . . . and the wholly-made-in-Australia target is well in sight!

Many farmers and graziers are mistakenly under the impression that New Holland grassland farming machines are imported into this country, complete from the U.S.A. This may have been so soon after World War II, but since then every year has seen the inclusion of an increasingly greater proportion of Australian-made content . . . today more than 80% . . . and soon every New Holland machine sold in Australia will be wholly manufactured in Australia! Our parent company and ourselves, have always adhered to the policy of closely co-operating with our Commonwealth Government in conserving local currency, as well as providing employment for an increasing number of Australian men and women.

Added to this, of course, is the enormous benefit of being able to adapt world-proven design and production processes, and operating efficiency, especially to suit Australian rural conditions and requirements.

This we have been able to successfully achieve, without sacrificing any of the unique advantages we enjoy from the immense resources of our parent company overseas. These include unrivalled research, design and testing facilities and a vast knowledge of grassland farming problems and equipment, accumulated over many years of practical experience. All this "know-how" is freely at our disposal, together with the tool and manufacturing data and specifications needed to produce grassland farming machinery . . . modern, efficient, and field-proven under all conditions . . . dedicated to a strong, progressive Australian agriculture and a vigorous, growing economy.

In the following pages we have endeavoured to show you how we are, and propose to continue, developing our share in this all-important national task.

Managing Director



VICTOR R. DESPARD, Jnr.
Director of International Operations
New Holland Machine
Company
New Holland, Pa., U.S.A.



ERNEST W. WILLIAMS
Managing Director
New Holland (Australasia)
Pty. Ltd.

A striking William Dargie mural enhances the foyer at the Head Office of New Holland (Australasia) Pty. Ltd. Conveniently situated to the right is a naturally lit, glass-fronted machine showroom.



(Above) A New Holland Hay Crusher operating in rich lucerne. This modern machine mows and crushes in one fast operation, resulting in quicker, more even curing, and better quality hay.

(Below) Modern machinery such as this New Holland Crop Chopper, shown operating in maize, double-chops crops swiftly and cleanly . . . gives forage more palatable to livestock.



Providing the truly economical answer where baled hay is the only crop to be elevated, this New Holland Bale Booster provides the same time-and-labour-savings as an all-crop elevator, at about half the cost.

Fodder Conservation

Fodder conservation is the practice of wisely using and perpetuating the natural resources of our agricultural grasslands and stock-food crops, so that nutritious feed is available for farm stock all the year round, from either growing pasture or conserved hay or silage.

One of the fundamental principles of a sound fodder conservation programme is the employment of efficient time, labour and cost saving machinery and equipment. In the Spring and peak season periods there is more often than not, an abundance of growing green feed. That is the time when surplus growth should be conserved against winter shortage, lean periods or drought, either in the form of hay or of silage. This entails the use of mowing machines, mechanical rakes, hay balers or forage harvesters, and other types of equipment, including pasture harrows which are used to spread animal droppings evenly over cut pastures in order to fertilize them in preparation for the next season's growth.

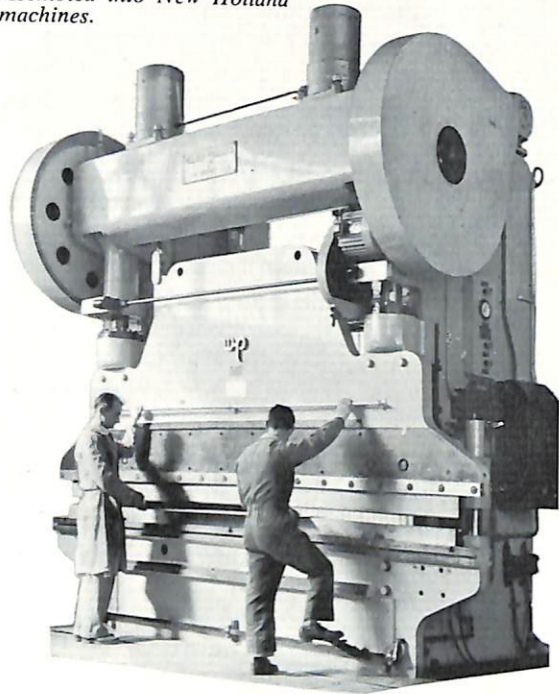
The design and manufacture of such machinery and equipment is a specialised industry in itself, and in this regard New Holland has made a considerable contribution toward the development of efficient fodder conservation in Australia, as well as in many other countries throughout the world.



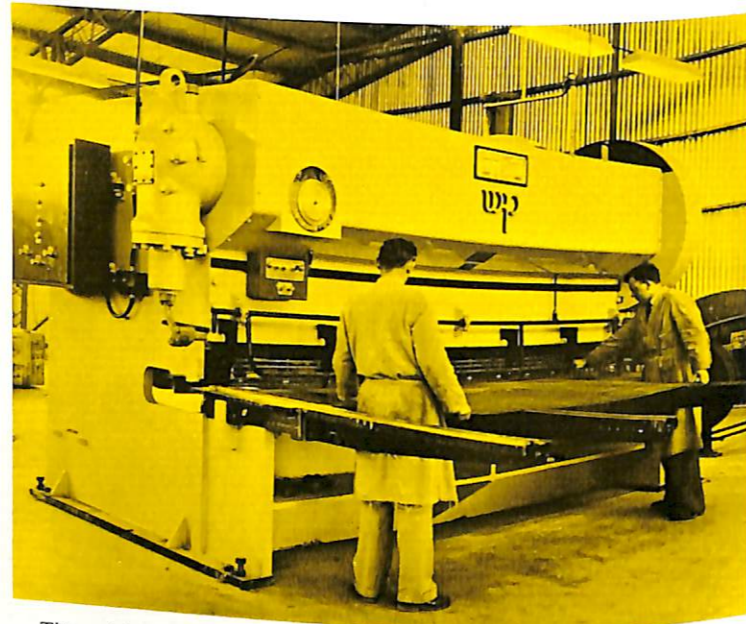
Fine cattle such as this prize herd owe much to a soundly planned programme of pasture improvement and fodder conservation.

Australian Manufactured

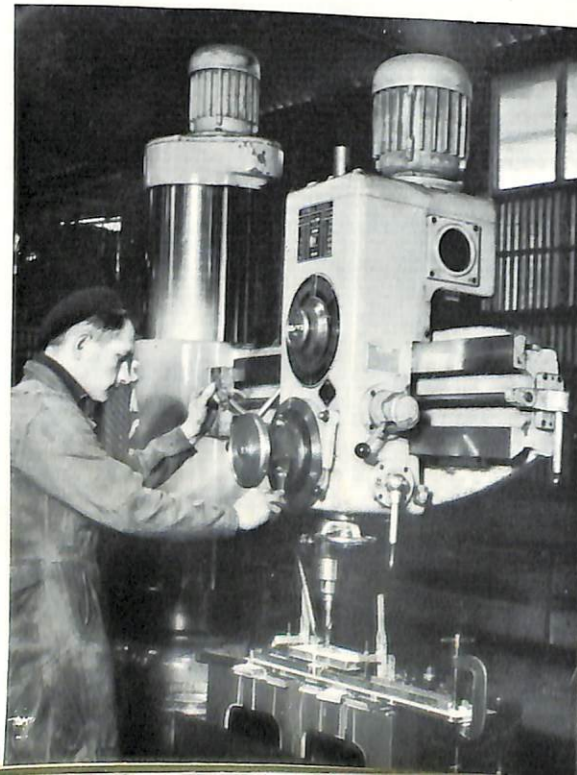
This huge press produces many of the high-precision components manufactured at the Dandenong factory, and assembled into New Holland machines.



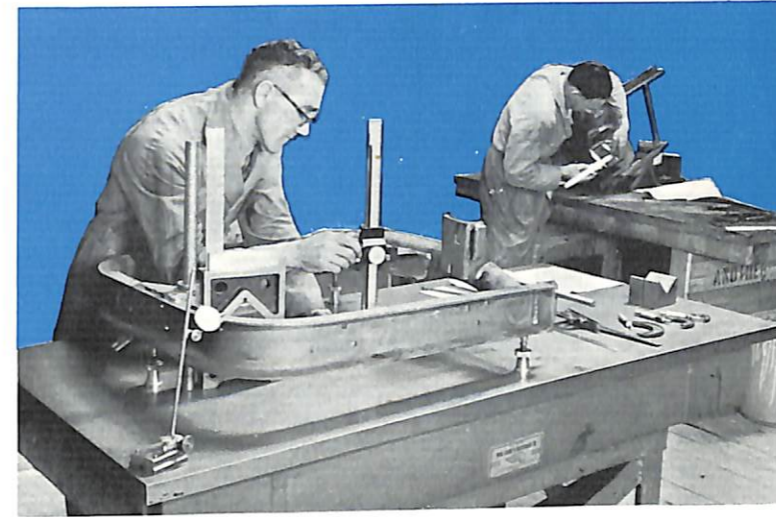
In a large, modern, streamlined factory at Dandenong, Victoria, New Holland grassland farming machines are both manufactured and assembled by skilled Australian operatives, working to exacting standards of precision and efficiency. Comprising the engineering section are some of the most modern machine tools available for drilling, pressing, guillotining and punch-pressing, all geared to high-speed, smoothly running production schedules, and producing many of the high-precision components used in the various types and models of New Holland machines. Outside local engineering firms, carefully chosen for their specialised knowledge of certain technical processes, or for the quality and range of their tooling equipment, also manufacture other component parts to New Holland design, specification and inspection.



This mighty guillotine cuts sheet-steel like pieces of paper and is an essential unit for the local production of component parts at New Holland, Dandenong.



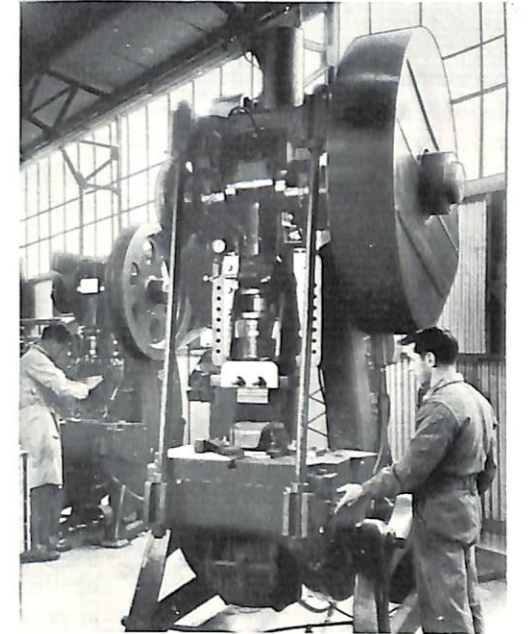
Modern high-speed drilling units such as this play an important part in New Holland's make-more-in-Australia, employ-more-Australians development programme.



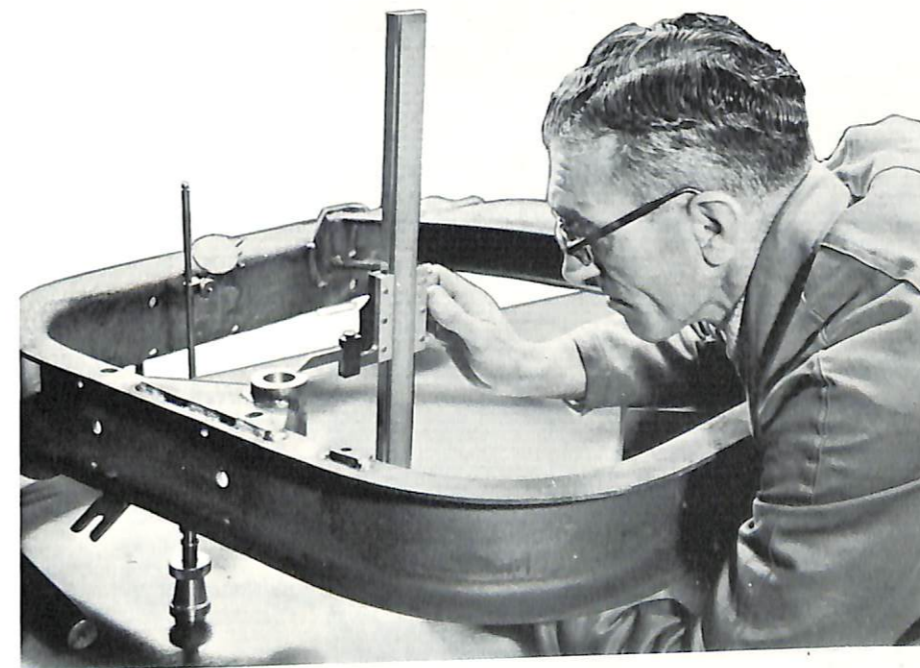
New Holland precision engineering calls for rigid inspection routine and the use of micro-measuring instruments. Here, a component part undergoes precision testing.

Micro-precision Testing

At every stage of manufacture exacting tests are made to ensure that New Holland's standards of quality and precision are maintained. Highly trained inspection staff employ gauges and micro-measuring instruments capable of detecting variations from specification to one-tenth of a thousandth of an inch . . . fifteen times thinner than a cigarette paper or the diameter of a human hair. Every component part is subjected to this precision-testing before it proceeds to the next stage of manufacture or assembly. Parts which do not strictly meet these requirements are rejected.



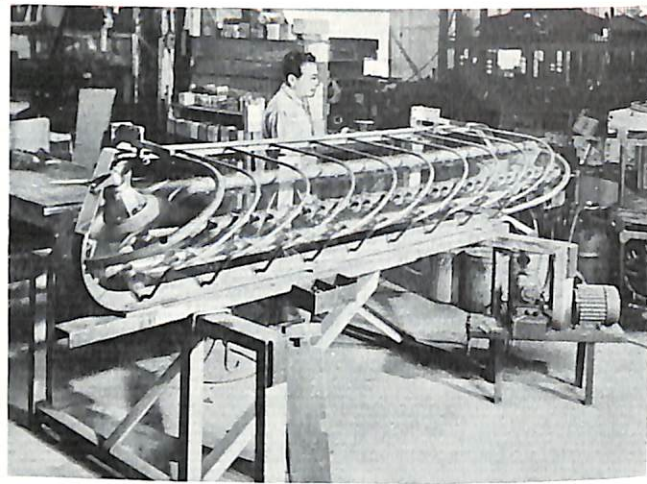
Punch-Presses like this one contribute the powerful mechanical skill and technique so necessary in building New Holland's wide range of fodder conservation machinery.



At every stage of manufacture components for New Holland machines are checked and tested to fine limits. The micro-measuring instrument being used here is capable of detecting variations from specification to one ten thousandth of an inch.

Exacting Inspection

Further, important working assemblies are given running tests and must pass the most thorough inspection, under conditions considerably more exacting than those that would be experienced in the field. New Holland "Rolabar" Side-Delivery Rake reels are run at high speed for correct balance and bearing alignment, Hay Baler knotters and plungers, Mower cutter bars, and other vital operating assemblies are put through their paces . . . each undergoes individual action-tests before passing to the assembly line . . . ensuring that working parts operate correctly, and are properly run-in, thus reducing breaking-in time when they are taken out into the field for the first time for practical working.



"Rolabar" Side-Delivery Rake assembly in a test rig ready for high-speed testing for correct balance and bearing alignment.

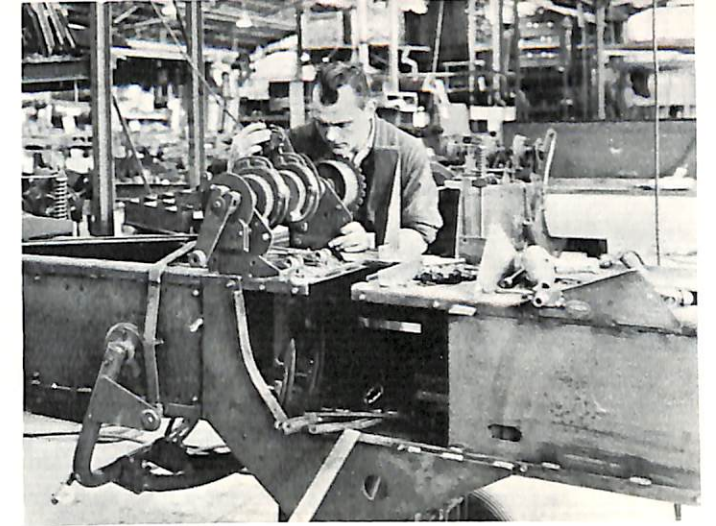
Electric-arc Fabrication

Electric-arc welding has long been accepted as one of the strongest and most durable methods of fabricating steel structures. At New Holland, skilled welders using the latest equipment and techniques, fabricate the four parts which go to make up the reel basket frame of "Rolabar" Side-Delivery Rakes. These are held firmly in position in a special jig which ensures uniform accuracy and efficient welding of the components into one strong, rigid unit. On other machines where welding is necessary similar processes are employed in order to achieve strength and durability.



To ensure maximum strength and durability, electric-arc welders at the New Holland plant fabricate the four parts which go to make up the reel basket frame of a "Rolabar" Side Delivery Rake.

Skilled mechanic fitting the knotting mechanism to the bale chamber of a "Hayliner 68" Hay Baler.



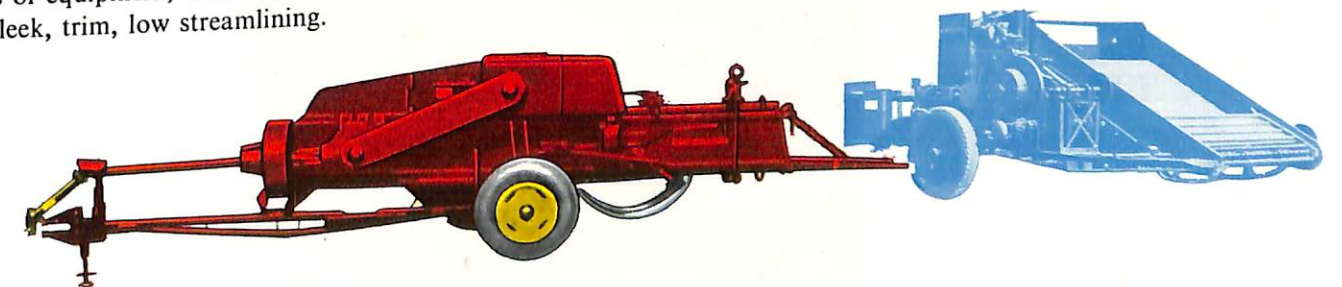
Machined and fabricated parts, bolts, nuts, washers, and a hundred and one other items which together make up the complex simplicity of a modern New Holland farm machine, flow in a steady but controlled stream to the huge Assembly Division. Here, skilled tradesmen assemble and adjust the seemingly myriad parts. Step by step, in their experienced hands, the components take final shape as New Holland Mowers, Rakes, Hay Balers, Forage Harvesters and other machines which are rapidly becoming a familiar sight on farms all over Australia.

Assembly and Adjustment

Some agricultural machine and implement designers would appear to have given little attention to the styling of farm machines other than tractors. This may be because farm machines are regarded as being primarily functional. There is no place on them for fancy tail fins and chrome work, but at New Holland, experienced designers support the principle that when a machine is correctly designed and engineered, it should have an acceptable appearance. New Holland machines have always been neat and conservative-looking, and above all, built to do an efficient practical job in the field. New Holland designers and engineers believe styling and finish should be governed by the size and shape of working parts, the need for easy access to adjustments, and other practical considerations. With this in mind, New Holland always aims for co-ordinated appearance of outer shielding, controls, and painting which will stand up to work and weather. That machines should look as good as they work, is borne out by the high standard of performance of two comparatively recently introduced New Holland Hay Balers, both of which are voted beautifully made pieces of equipment, with their two-tone automotive finish and sleek, trim, low streamlining.

Stylized Finishing

The sleek, trim, low streamlining of this New Holland "HAYLINER 68" Twine-Tie Hay Baler incorporating "FLOW-ACTION" shows the high standard of design developed since New Holland introduced the world's first automatic pick-up hay baler (shown in blue) nearly twenty years ago.



Stylized Finishing

The durability of New Holland finish is the result of careful planning and attention to detail which originates on the designers' drawing board and carries right through to the New Holland dealer's showroom, and in-the-field operation. Every part, except working parts which must be left unpainted, is protected by a baked undercoat before assembly; bolts, nuts and other similar accessories are cadmium-plated for resistance to rust. All undercoats and fine finish enamels are specially manufactured for New Holland to formulae developed after years of exposure-tests for colour and gloss durability.

Scenes like the accompanying photograph of a "Hayliner 68" Hay Baler being "rubbed down" with an electric orbital sander, would be familiar enough in an automobile factory, but are somewhat unusual in the agricultural machinery field. Yet, the final finish of every New Holland Hay Baler is prepared in this manner, for it is realised that this attention to detail builds longer life and better performance into New Holland products.

The final step in finishing is when gloss enamel is sprayed in the latest "water-curtain" air-conditioned spraybooth. From there the assemblies journey by an overhead monorail conveyor into a stoving room for quick, hard, dust-free drying.

"Hayliner 68" being "rubbed down" with an electric orbital sander to ensure a smooth surface for the final application of gloss enamel spray finish.

In this modern "water-curtain" air-conditioned spraybooth baler pick-up assemblies are sprayed with a high-gloss enamel finish, before being conveyed by overhead monorail to the stoving room for quick, hard, dust-free drying.

Crating for Transport

Safe transport is just as important as any part of the manufacturing process, for careful assembly and painstaking finish can be spoiled by damage in transit. Every New Holland machine leaves the factory at Dandenong, safely protected by a sturdy hardwood crate. Heavy or easily-damaged components such as engines, flywheels, towbars, wheels, power-take-off shafts and so on, are separately packed in such a way as to avoid damage or loss.

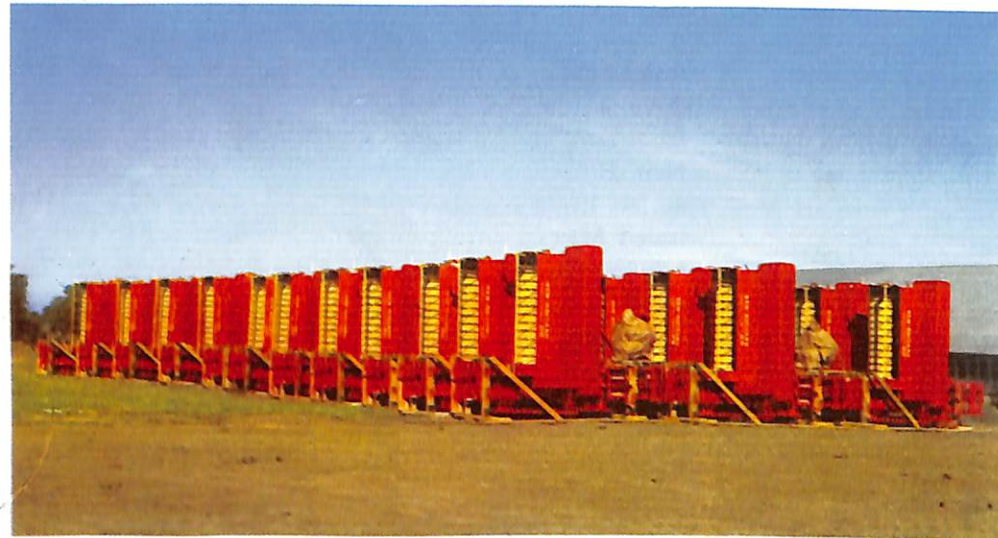
Final Assembly at Point-of-Sale

The last stage in the New Holland production story, is reached of course, with the shipment of the crated machines by road and rail to New Holland dealers all over Australia. On arrival at the dealer's premises, the machines are carefully uncrated, and the final assembly of wheels, engine, power-take-off shafts and so on, carried out by specially trained dealer personnel. At the same time each machine is given a thorough pre-delivery-to-owner check-over, and adjustment and lubrication according to the comprehensive New Holland Check Lists which are supplied to every dealer. Every machine carries with it a detailed and illustrated Manual of Operating Instructions and a genuine Lifetime Warranty Certificate. Then and then only, are they ready . . . as ready as human care and supervision can make them . . . for delivery to their final users — the farmers and graziers of Australia.



"Hayliner 68" Hay Balers being crated in sturdy hardwood dealer-packs prior to shipment by road and rail to dealers' premises throughout Australia.

New Holland Model 55 "Rolabar" Side-Delivery Rakes awaiting delivery. "Gently does it — from swath to perfect windrow in half the distance" is what farmers everywhere say about this implement.



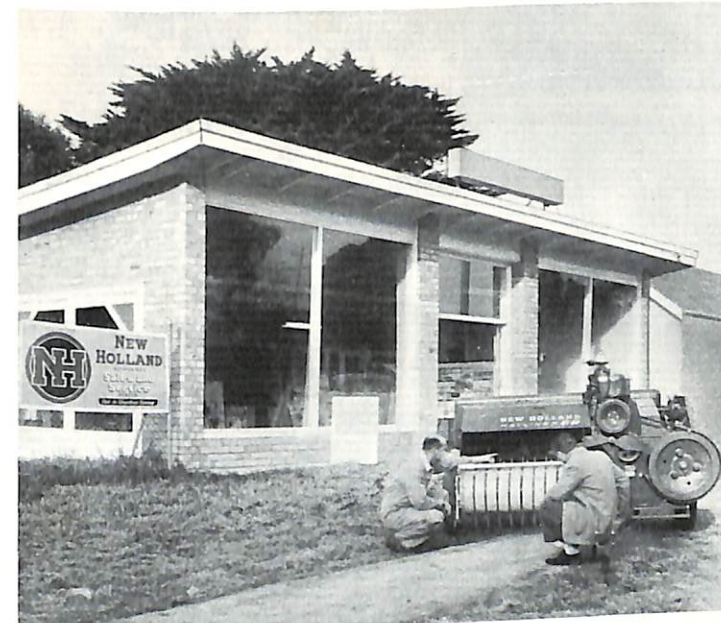
New Holland "Hayliner 68" Hay Balers ready for shipment, to meet the increasing demand for these high-capacity machines for the average-size farm.



A line-up of New Holland Hay Bale Loaders at the New Holland Dandenong factory. A tremendous time and labour-saving piece of equipment in a well-planned fodder conservation programme.

Australia-wide Sales & Service Dealer Network

Typical New Holland dealer premises . . . one of many comprising the Australia-wide network of carefully selected sales-and-service minded representatives who know farmers' problems, and are factory-trained technicians.

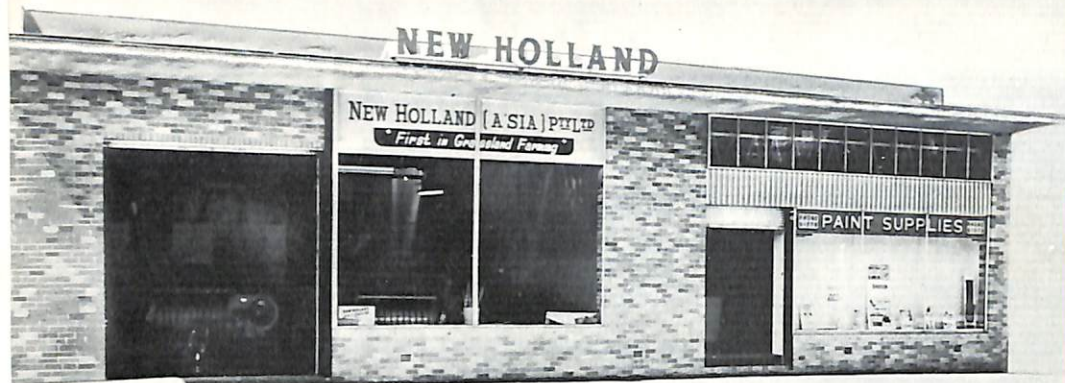


The New Holland story, however, does not end here, for behind the design, manufacture, final production and shipment of New Holland grassland farming machinery to carefully selected authorised Dealers in all parts of Australia, is a highly organised framework of New Holland Branches in each State, and a widespread Sales and Service Dealer network in every farming community . . . *plus* a continuously operating system of service parts and in-the-field-service that supports the unique *lifetime-warranty* that goes with every New Holland machine sold in Australia.

The ready availability of service parts is a feature of New Holland Dealers' on-the-spot service . . . in the field, if necessary!



The sign of New Holland Sales and Service. Colourful, illuminated and becoming more and more familiar to farmers throughout Australia.



QUEENSLAND BRANCH
43 Breakfast Creek Road,
Newstead



NEW SOUTH WALES BRANCH
80 Parramatta Road,
Lidcombe



SOUTH AUSTRALIAN BRANCH
480 North East Road,
Windsor Gardens

WEST AUSTRALIAN BRANCH
Albany Highway,
Cannington, Perth



There's a New Holland Branch in Every State

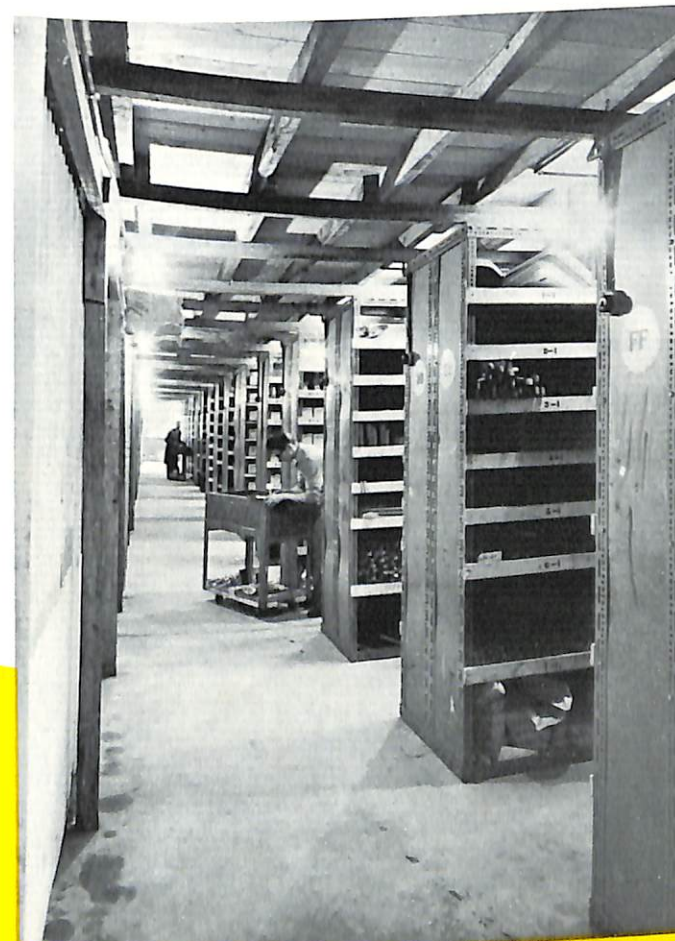
New Holland has Branches located in the capital city of each State, as the nerve centre of the tremendous areas over which the Sales and Service Dealer network is spread. From each of these State Offices . . . at Brisbane, Sydney, Melbourne, Adelaide, and Perth with representatives at Launceston and Hobart in Tasmania . . . specially trained Supervisors are in constant touch with dealers in all districts, ensuring prompt deliveries and smooth operation of New Holland sales and service facilities.

Efficiency and prompt attention to calls for Service Parts is the keynote of the all-important Service Parts Dept., at every New Holland branch.



"Emergency Attention" to All Calls for Service Parts

New Holland regards every request for a replacement part as an emergency! Each State Branch maintains ample stocks of parts, and New Holland Dealers aim to give round-the-clock service, seven days a week, during the hay season. At Dandenong, Victoria, the New Holland Service Parts Department readily undertakes emergency despatch by air, road, rail or post throughout the length and breadth of Australia. In this way New Holland lifetime-warranted quality is backed by genuine New Holland service when and where it counts most . . . at the machine working location in the field if necessary!



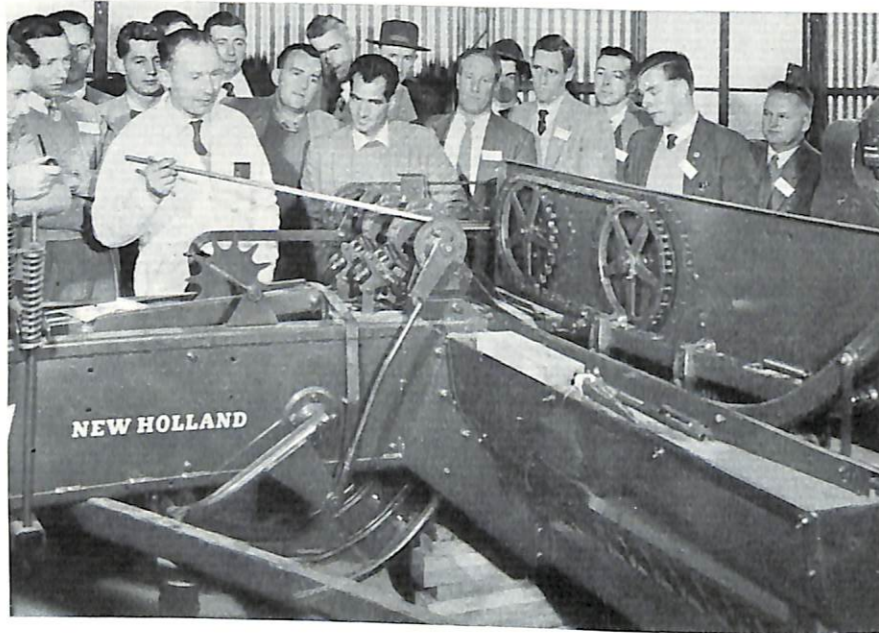
A section of the Service Parts Dept., at New Holland's Dandenong plant (Vic.) . . . "control centre" of the widespread branch and dealer Service-Parts organisation which extends throughout the length and breadth of Australia.

Sales Conventions, Technical Training Schools,

Machine Owners' Advisory Service

And, finally, behind this immense, organised plan for production, distribution, sales, and service, is a regular programme of training for New Holland staff at every level, sales conventions and training schools for dealer personnel, and an advisory service freely available to New Holland machine owners everywhere.

At special lectures and film screenings are demonstrated the principles and practices of modern, efficient fodder conservation . . . in this way farmers and graziers throughout Australia are learning the wisdom of controlled pasture preservation and stock-feeding, for greater output and increased profit on their investment. This is the story to date, of New Holland's share in the all-important task of developing a strong, progressive Australian agriculture and a vigorous, growing national economy.



Following a carefully planned and scheduled syllabus, New Holland technicians and supervisors train dealer personnel in all aspects of mechanical operation and service of New Holland machines. Here is a typical assembly of "students" at a Dealer Training School.



Field Days and Field Demonstrations are an important part of New Holland's Sales and Training programme. At left is a party of Sales Executives discussing the finer points of modern fodder conservation practice, and the operation of machines they have been watching at a typical Field Demonstration.

OWNER'S WARRANTY

When you invested in your New Holland farm equipment you became eligible for the protection of the New Holland Owner's Warranty. When this Warranty is registered at New Holland, Dandenong, New Holland guarantees to replace without charge (f.o.b. New Holland) any parts which, inspection by the Company indicates, failed as a result of questionable quality or workmanship in the original assembly.

New Holland makes no warranty whatever with respect to engines, tyres, tubes, ignition apparatus, magnetos, carburettors, or other trade accessories not manufactured by it, as they are subject to the warranty of their respective manufacturers. No warranty whatsoever is made on any used, secondhand, altered, or rebuilt machines.

New Holland's liability in connection with the manufacture, sale, or use of any of its products is expressly limited to the repair or replacement of defective parts as above set forth. The Company specifically assumes no other liability for damages of any kind or nature, direct, consequential or contingent.

This guarantee is in effect during the normal operating life of this equipment, providing the equipment is operated and maintained in accordance with the recommendations outlined on the Operator's Manual; was purchased from an authorised New Holland dealer; and is in the hands of the original purchaser.

NEW HOLLAND (AUSTRALASIA) PTY. LTD.

Dandenong—Victoria



Grass . . .

" . . . is the forgiveness of nature — her constant benediction. Sown by the winds, by wandering birds, propagated by the subtle horticulture of the elements which are its ministers and servants, it softens the rude outline of the world. Its tenacious fibres hold the earth in its place, and prevent its soluble components from washing into the wasting sea. It invades the solitude of deserts, climbs the inaccessible slopes and forbidding pinnacles of mountains, modifies climates, and determines the history, character, and destiny of nations. Unobtrusive and patient, it has immortal vigour and aggression. Banished from the thoroughfare and the field, it bides its time to return, and when vigilance is relaxed, or dynasty has perished, it silently resumes the throne from which it has been expelled, but which it never abdicates. It bears no blazonry or bloom to charm the senses with fragrance or splendour, but its homely hue is more enchanting than the lily or the rose. It yields no fruit in earth or air, and yet should its harvest fail for a single year, famine would depopulate the world."

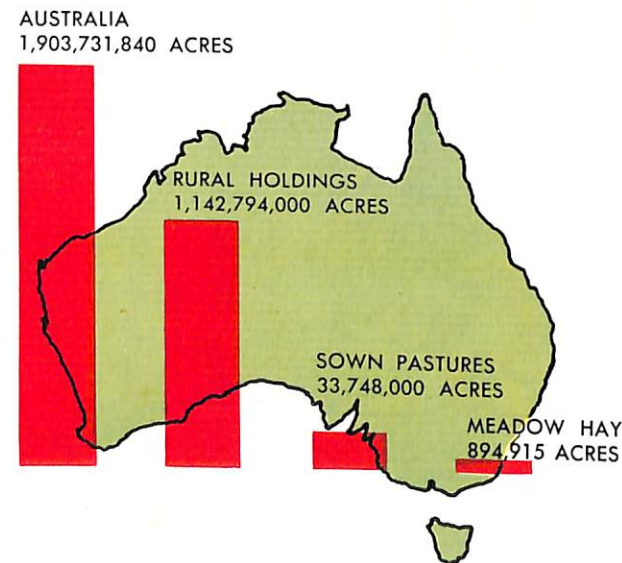
*U.S. Senator INGALLS
United States of America
1872*

Grass . . .

our national heritage !

Grass is our most valuable, our most important crop! And it is also one of Australia's most sadly neglected heritages. As early as 1803, our agricultural pioneers laid the foundation for *a nation built on grass!* It was at that time that our third sailor Governor, Captain King, reported on experiments with improved grasses at the Government Farm on the Hawkesbury River in New South Wales. Captain King set the pattern for our future agricultural expansion . . . new grasses, new husbandry, new breeds of cattle and sheep.

Since then, however, progress has been indeed disappointing. Today, improved grasses and pasture legumes cover no more than 2.9% of our total farm acreage. We may not talk with any great degree of confidence of Australia's unlimited future until this low percentage figure is substantially increased. It calls for a determined movement, nation-wide and with the full support of all vitally concerned, in order to create an immediate awareness, and to inspire immediate action in stepping up our pasture improvement programme. The initial impetus must surely be looked for from farmers and graziers throughout the whole of Australia.



Comparative diagram which gives some idea of the immense differences between the total acreage of Australia, actual rural holdings, pastures sown, and meadow hay.

Said Professor R. D. Watt of Sydney's University "Australia's cattle and sheep capacity would be doubled and the general soil fertility of immense areas permanently improved if pasture improvement were put into practice to the greatest possible extent". Dr. J. G. Davies of the C.S.I.R.O. has warned us that "Animals, particularly sheep and cattle, must always remain a dominant feature of our agriculture and they must be mainly fed on legume-based pastures. Failure to do this will eventually be disastrous. Our land will become derelict, our soils wasted, and our rural population reduced to a coolie status. *The rise and fall of nations and civilizations seems to be closely associated with the rise and fall of soil fertility!*"

Growing more and better grasses and pasture legumes is not the answer in its entirety. Seasonal variations in pasture growth are such that 70% goes to waste each year, except for the comparatively small amount that might be harvested as hay or silage. In actual fact, our national wastage of plant foods must run into astronomical figures, when we consider that less than 3% of our areas under improved pastures, is harvested as meadow hay. It is all too apparent that failure to increase our efficiency in this regard, cannot fail to leave Australia with a permanently depressed stocking capacity.

And if the spring and monsoonal rains, which so regularly fail us, should happen to fail us for a long and protracted period, only substantial fodder reserves could save us from national disaster. In a major drought . . . and such a long dry period has already been hinted at . . . our present fodder

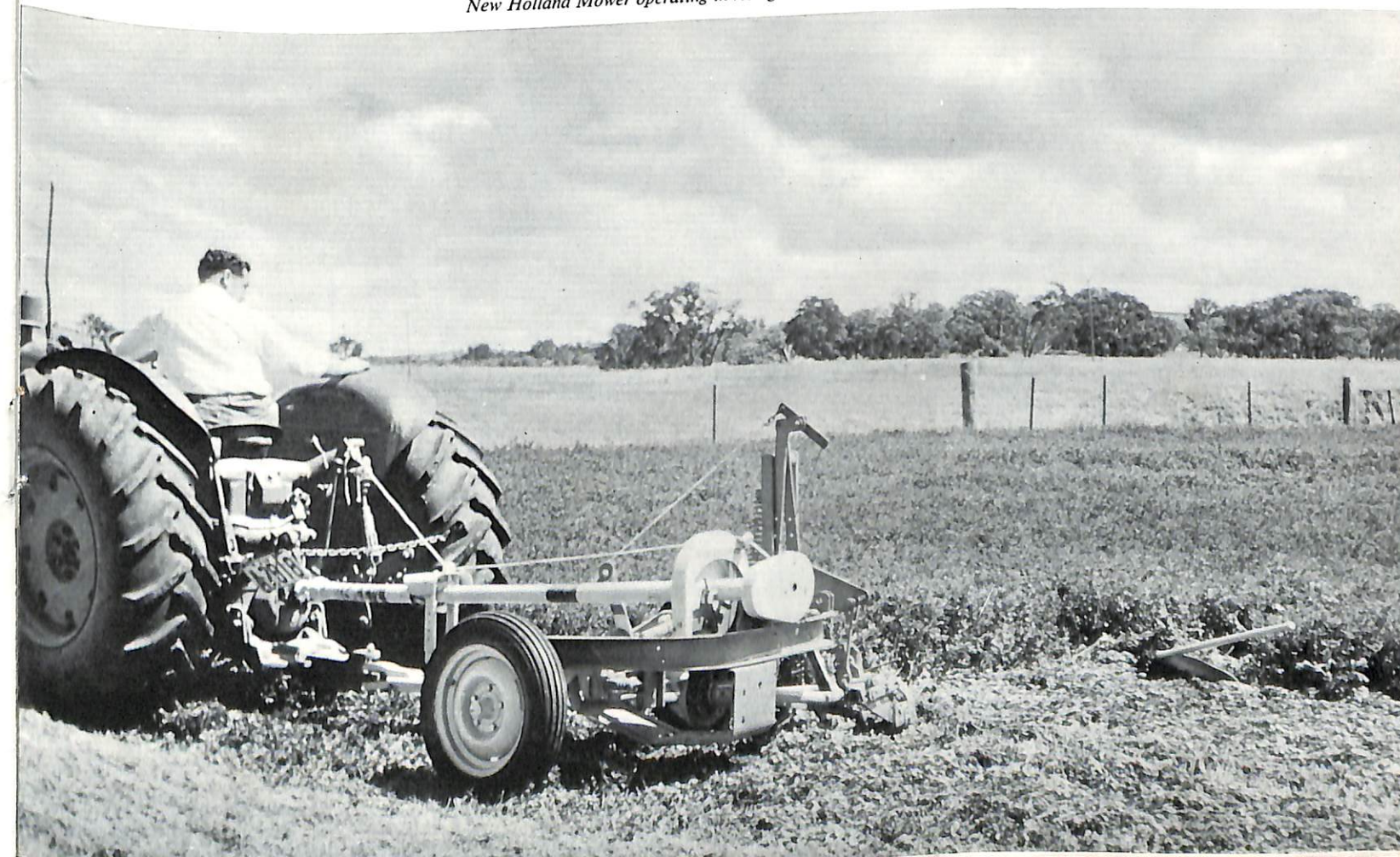
reserves could not last longer than from two to three weeks at the most. Real progress, and safety, in Australia's live-stock industry would appear possible only by our *storing seasonal surplus every year!*

It is impossible to understand this apparent indifference towards an efficient grassland agriculture, when it is realised that Australia could become one of the world's largest food bowls . . . a cheap source of staple food for our expanding population, as well as for Asia's teeming millions. Indifferent we cannot remain, for statistics show us that after a succession of good years and favourable prices, many graziers do not make bank-interest on their invested capital. A recent survey in Tasmania by the Bureau of Agricultural Economics, revealed that only during the 1956-1957 season, did the rate of return on capital invested exceed bank interest. Over the balance of the years during which the survey was conducted, the actual return averaged only 2½%.

"It is not too much to say that a farm, on which production livestock is one of the main activities, cannot be managed efficiently unless fodder conservation is judiciously practised."

MANAGER, Werribee State Research Farm, VIC.

New Holland Mower operating in rich grassland in Southern Victoria



Similarly, our dairy industry produces butter at a higher price than is acceptable to the average consumer. The Commonwealth Government is obliged to meet this situation by subsidising the industry to the tune of some £13,000,000 annually.

A part, at least, of the solution to the problem of un-economic returns lies in our own hands. Wasted flush growth is all too obviously the bottleneck in today's farm economy. We have the *tools* and the *knowledge* to convert our huge annual tonnage of summer waste into profit-earning hay or silage.

Mechanised fodder conservation aims at retaining the plant foods of flush, surplus growth in the form of hay or silage. This stored fodder is used to supplement grazing during periods of low growth, or no pasture growth. But success in making hay or silage calls for a planned approach. It is recognised that, ideally, livestock farmers should have on hand, after every flush season, for every beast . . .

3 tons of hay or 7½ tons of silage
and for every sheep . . .

½ ton of hay or 1½ tons of silage
or a proportional combination of both hay and silage.

Unfortunately the opportune time for harvesting pasture is often limited to a few weeks in each year, mainly because of the rapid deterioration in food value of grasses approaching maturity. That is why, next to planning, the timing and the efficiency of the harvesting operation is important. Here both know-how and machinery combine in making a quality product.

It is also unfortunate, and due to misunderstanding, that most farmers cut their grasses too late. Grasses should be cut at early flowering. This is a compromise stage between obtaining maximum protein and maximum bulk. More protein can be stored in hay or silage when it is cut earlier, and the loss of bulk balanced against the increased regrowth of the pasture. This is practicable where early maturing grasses are grown in dry areas, and late maturing grasses are grown in wet areas. Where weather conditions are not suitable for haymaking, the early cuts are often made into silage. An efficient and reliable mower is capable of handling heavy crops at the rate of from three to five acres per hour.

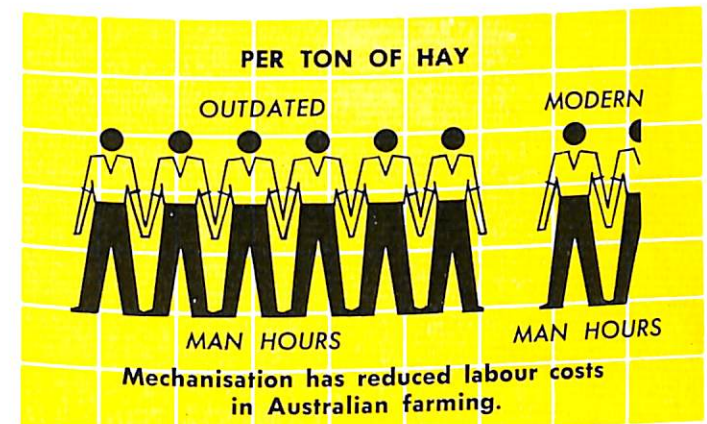
However, once forage is cut, the risk of nutrient losses is increasingly great. Therefore, it is all-important that the forage be moved into even and fluffy windrows quickly, for well-built windrows speed up the curing process and secure maximum capacity from the pick-up type hay baler.

The Rolabar Rake has been designed to move forage gently from swath into windrow with a minimum of travel, which is a highly desirable factor. This type of rake can be set to roll open windrows for quick curing, or tight windrows for wilting, if the forage is to be used for silage making. Another machine, a Mower Crusher, is a combination of mower and forage crusher, and helps to speed up the curing process by cracking the stems of the plants. With the aid of this machine many farmers have been able to cut curing time by half and increase quality by putting richer-in-protein leaves into each bale of forage. At 65% moisture content, wilted forage (wilting is necessary, if high protein

crops are ensiled) can be baled with a pick-up type baler, or for silage . . . chopped by using a Forage Harvester, fitted with a pick-up attachment.

Hay will not keep unless it contains less than 25% moisture. At that stage it may be picked up from the windrow with a Forage Harvester for chopped hay, or with a pick-up Hay Baler for baled hay. Both Forage Harvesters and Pick-up Hay Balers have a high capacity and efficiency rating, which makes grassland agriculture a practical and profitable system of farming in Australia.

Information as to the right way to plan fodder conservation is freely available from the Departments of Agriculture in each State, and New Holland's trained personnel and a qualified agronomist are only too willing to advise on the proper combination of fodder conservation practice and the specialised New Holland machinery that is available.

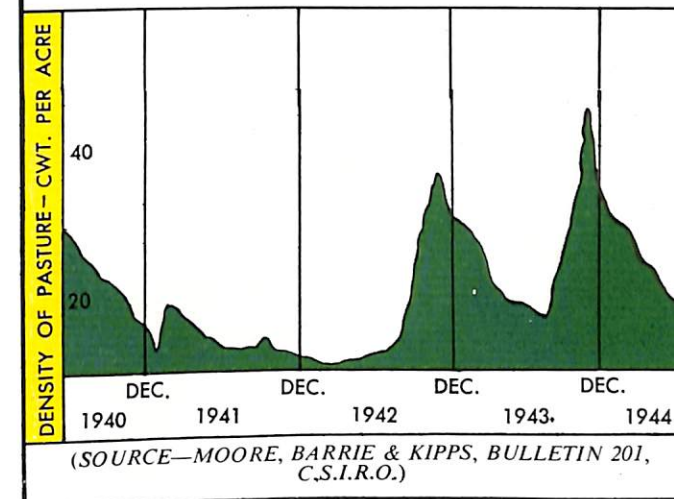


In case of severe drought — only substantial reserves can save Australia from the danger of disaster! For maximum stocking at no risk farmers should aim to have on hand for every beast . . .

3 TONS OF HAY OR 7½ TONS OF SILAGE

and for every sheep . . .

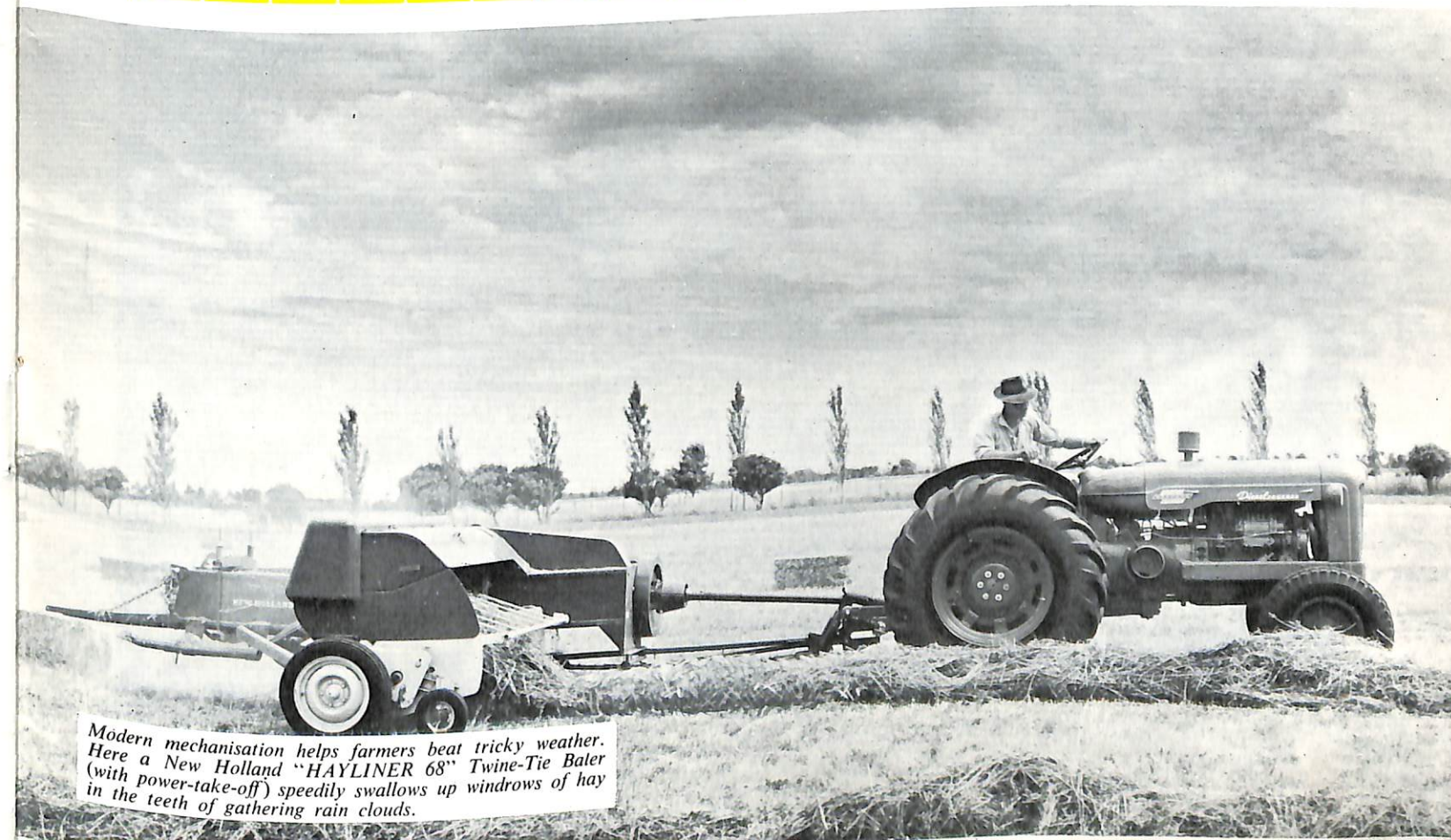
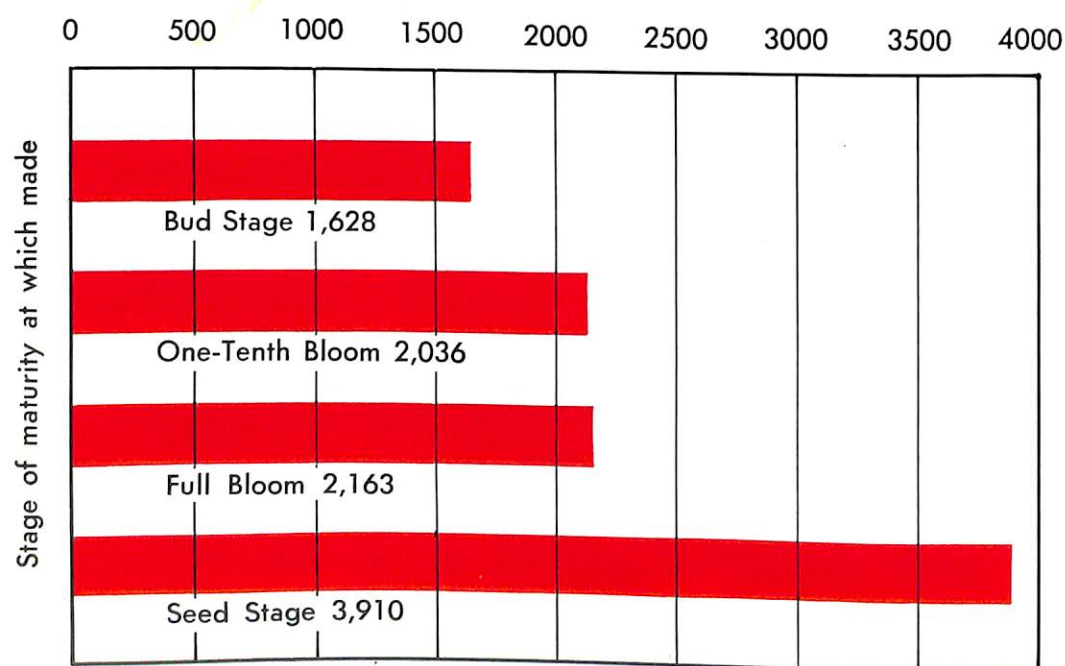
½ TON OF HAY OR 1½ TONS OF SILAGE



Pounds of Hay Required for 100 Pounds Gain

CUT HAY EARLY

There is no cheaper or better method of supplementing off-season grazing than with HAY! Hay turns waste into profit! Hay is easy to make! Hay is easy to feed!



Modern mechanisation helps farmers beat tricky weather. Here a New Holland "HAYLINER 68" Twine-Tie Baler (with power-take-off) speedily swallows up windrows of hay in the teeth of gathering rain clouds.

"Freedom from Hunger"

(Campaign Slogan of world-wide
Food and Agriculture Organisation)



Located on the very front doorstep of South East Asia, it would appear that Australia is destined to become the food producing and manufacturing centre of that vast area of teeming millions. Such huge populations cannot be left to go hungry, or continue existing on a standard of living that has shown little improvement over hundreds of years. Apart from humane considerations, the very survival of Australia itself could well rest with our rendering increasing aid where it is required. There is little doubt that we simply cannot afford to ignore this tremendous potential export market for our staple food products, agricultural machinery, and a host of other urgently needed commodities.

Leading authorities of various organisations concerned with world food supply contend that while growing population does not necessarily threaten the future with widespread starvation, there are still millions whose existence is well below normal by Western standards, and even borders on starvation. Although a greater part of the world's arable land is already in use for food production, and is still insufficient to meet increasing food needs, this is being compensated for to some degree by science's contribution to food production. However, there remains the great problem of quickly getting food to areas stricken by wide-scale famine, and the formidable problem of opening up additional great areas now non-productive, or under-producing because of inadequate irrigation or hopelessly out-of-date agricultural practices.

No one section of Australia's community can supply the total needs of South East Asia . . . it is a task on a grand scale, to be undertaken with determined action and long

range planning by both government and private enterprise alike. South East Asian standards of living cannot be improved sufficiently and sustained by emergency food shipments or by the importation of packaged goods alone. The final answer surely lies in the attainment of a sound local national economy and a strong, adequate agriculture. In this latter regard New Holland (Australasia) Pty. Ltd., can play an important role. Plans are already under way for the export of New Holland grassland farming machinery to New Zealand, Malaya, and the Philippines, as well as to the great South East Asian markets. During a recent visit to Australia, Mr. Victor R. Despard Jnr., Director of International Operations for the New Holland Machine Company (U.S.A.), outlined his Company's Australian export policy. He stated that as steel is very reasonably priced in Australia, and that Australian labour produces as well as any other of New Holland's factories throughout the world, Australia being nearer to these markets, was consequently the logical export source to the Pacific Area and South East Asia.

Farmers all over the world, Mr. Despard said, have found it absolutely necessary to supplement the feed of their stock at certain times of the year, even though they practise grazing throughout the year. A supplement of hay had proved invaluable in wet seasons particularly, and during prolonged dry-spells or drought, the feeding of forage and

green hay to stock had been a life-saving factor. Based at Dandenong, Victoria, New Holland (Australasia) Pty. Ltd., might well in time, not only be the export source to the Pacific Area and South East Asia, but to other great continents such as Africa. The future has tremendous potential for this highly specialised industry.



NEW HOLLAND (AUSTRALASIA) PTY. LTD.

(DIVISION OF SPERRY RAND CORPORATION U.S.A.)

Head Office: 232 Princes Highway, Dandenong, Vic.

Interstate Branches:

QLD.: 43 Breakfast Creek Road, Newstead

N.S.W.: 80 Parramatta Road, Lidcombe

SOUTH AUST.: 480 North East Road, Windsor Gardens

W.A.: Albany Highway, Cannington, Perth

Tasmanian Dealers:

Farmers & Graziers Co-operative Society Ltd.

New Holland is the largest organisation in the world
specialising solely in fodder conservation machinery