"I know of no pursuit in which more real and important service can be rendered to any country than by improving its agriculture and its breed of useful animals." — George Washington
HARVEST SCENES
OF THE WORLD

ISSUED BY THE
I.H.C SERVICE BUREAU
INTERNATIONAL HARVESTER
COMPANY OF AMERICA
(INCORPORATED)
CHICAGO, U.S.A.
Pioneers of the Harvesting Machine Industry

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HE photographs reproduced in this volume have been secured from every quarter of the inhabited world, and the work of collecting them has been under way for a number of years. The illustrations show every method of harvesting known to man since the time of Rameses, 2500 years B.C.

The basis of progress is agriculture. This is beginning to be quite generally understood, but comparatively few people realize how important a part the harvesting machine plays in the industrial progress of the world.

The invention of the reaper in 1831 and the subsequent development of the modern farm machine industry made it possible for the United States to advance from a low rank among nations to the very highest position, with a capacity in production of food stuffs and manufactures nearly equal to that of all Europe. Agriculture is the real basis of commercial development, and improved agricultural machines are fast driving the fear of famine out of the heart of man.

In the United States, 500,000,000 acres are now under cultivation. There are 74,000,000 acres of swamp lands that can be made available by drainage, and there are 35,000,000 acres that can be reclaimed by irrigation. The world’s population is steadily increasing, and we have already reached the time when it has become imperative to make the fields yield more bountiful harvests in order that the people of every country may be properly supplied with food.
Plowing in Ancient Days—Egypt
From the hieroglyphics found in the mounds of ruins near Thebes, we learn that the Egyptians in the Twelfth Dynasty, some twenty-five centuries B.C., used the reaping hook to harvest their wheat. This is the earliest known record that makes any reference to either the reaping hook or wheat. Both, therefore, are as ancient as the earliest recorded thought—the origin of both is unknown. A long story could be written about the antiquity of the reaping hook—how this remarkable implement remained unchanged for more than forty centuries, and how during the same period man used this crude device to discover new continents and carve out the destinies of empires. The early Colonial farmer plowed his fields with a wooden plow, sowed his grain broadcast by hand, harvested his crop with a scythe, and threshed the grain on the barn floor with a flail. Today the United States is remarkable for the value and number of its agricultural machines and farm implements. This country excels all other countries in the invention and development of machines for the cultivation and harvesting of crops.
Inundation of Nile Valley—Egypt

The Changeless Sphinx

Dam Across The Nile
Harvesting with the Reaping Hook—Algeria

Winnowing Wheat on Mount of Olives—Palestine

Women Grinding Wheat—Palestine
Sowing Wheat
Broadcast by Hand

Reaper used by the Gauls in A.D. 1

Cutting Grass with the Scythe
Gleaning the Grain from the Stubble

Harvesting with the Cradle

Threshing with the Flail
The First Reaper — Invented by McCormick in 1831
Reaper with Seat for Raker

First Self Rake Reaper

The Marsh Harvester
Modern Binder in a Western Oat Field
During the first half of the nineteenth century the American farmer was compelled to perform nearly all of his labor by hand. Practically the only implements drawn by horses in those days were the plow and the harrow. Wheat was sown broadcast by hand then, as in Bible times, and covered with a harrow, while corn was dropped in furrows by hand and covered with the hoe. Harvesting, the most important of all farm work, was still done with the reaping hook which had remained unchanged since the earliest known reference to the growing of cereals. Later, the hand cradle in many instances replaced the reaping hook, but still the labor of harvest was too slow. The invention of the reaping machine in 1831, and the consequent development of the modern farm machine industry, made it possible for the United States to advance from a low rank among nations to the very forefront among the world’s greatest powers. The rapid settlement of the new states, and the successful gathering of their immense harvests, have been made possible by improved farm machines—and the large farms and ranches, where the furrow is plowed for miles, and where the line of binders sweeps across wheat fields embracing thousands of acres, have been made possible by the genius of American inventors.
Grubbing Land in the Northwest

Removing Sage Brush from New Lands

Plowing in Washington
The Manure Spreader in Operation

Fertilizing a Ten-Foot Strip
Preparing the Seed Bed

The Spring Tooth Harrow Insures a Good Seed Bed

Putting the Finishing Touches on the Seed Bed
Plowing, Harrowing, and Pulverizing in One Operation

The Drill Covers the Seed at a Uniform Depth

Seeding Time in the Wheat Belt
Disking Stubble to Conserve Moisture

Plowing Made Easy

The Disk Harrow Is an Exponent of Prosperity
Making a Good Seed Bed

Smoothing Harrow with Riding Attachment

Harvesting a Heavy Crop of Wheat
The Modern Binder Does Excellent Work

An Indiana Wheat Field

Harvest Scene in Iowa
Farm Scene along the Hudson River in New York

Cutting Timothy for Seed

The Reaper is Still Used in Some Localities
A Heavy Field of Hemp

Cutting Hemp with the Reaper

Harvesting Hemp in Kentucky
Grain Binder on the Way to the Field
Indians Harvesting in Minnesota

A Western Harvest Scene

Harvesting Oats in Wisconsin
An Oil Tractor
Operating Five Binders

Wheat in the Shock

Wheat in the Stack
Scene in Central Indiana
The Noon Time Siesta
The Header Binder

A Header in a Kansas Wheat Field

Stacking Headed Wheat
Oil Tractor
Operating Threshing Machine

Modern Threshing Outfit on the Road

Wheat, (200,000 Bushels)
Pendleton, Oregon
Rice Field in Texas

Harvesting Rice in Texas

Threshing Rice near Crowley, Louisiana
Picking Cotton near Atlanta, Georgia

Cotton Compress

A Cotton Gin in Alabama
A Picturesque Corn Field
Planting Corn

Cultivating Corn

Husking Corn by Hand
Corn Binder in Operation

Corn Picker and Husker in the Field

A Silo Filling Outfit
A Large Corn Shelling Outfit

Shredding Corn Fodder

Making Corn Meal
Main Irrigation Canal near Billings, Montana

Pumping Water with a Gasoline Engine

Irrigating an Orchard
Spraying an Orchard

Irrigating from a Kansas Stream

Orchard in the Foothills of Eastern Washington
Irrigated Apple Orchard, North Fork Valley, Colorado
Picking Strawberries in New Mexico

Hop Field in Willamette Valley, Oregon

Diversified Farming
Modern Farm Yard
Scene

Returning from a Hurried
Trip to Town

Taking a Perishable Crop to Market
Stacking Hay in Georgia
A Field of Alfalfa in Bloom

A Heavy Growth of Timothy

White Clover, Willamette Valley, Oregon
Cutting a Heavy Crop of Timothy

Trimming the Bank of a Stream

Harvesting a Good Crop of Timothy
Operation Raking a Heavy Crop of Hay

The Side Delivery Rake in Operation
In the Hay Field

Sweep Rake in Operation

Stacking Hay
A Busy Day in the Hay Field

Loading Hay on a Wagon

Hay Loader in Operation
On the Way to the Barn

Storing Hay in the Mow

Mowing Machines
on a Large Hay Farm
The Hay Press in Operation

Baling Hay with a Motor Baling Press

Alfalfa Baled Ready for Market
Passing a Tree in the Hay Field
A Familiar Farm Scene

The Old Straw Stack

A Dairy Barn

A Familiar Farm Scene
A Bundle of Wheat

Prize Winning Oats

A Bouquet of Corn

A Sheaf of Rice
Binder in Canada Mounted on Transport Trucks
Canada

"Westward the course of empire takes its way" is as true today as it was in the eighteenth century when this watchword was first given to the world. Today, civilization stands on the edge of the wilderness; towns grow on the borders of the wild, the call of which is still heard. The charm of the wilderness will linger long, but it must be lost at last. The rush of empire will change the face of nature. There must be gain in it since it is destiny. The base of existence is bread and butter, and this reconciles us to the loss of solitary lakes, to the passing of the continuous woods with the charm of their remoteness and happy loneliness. Swarming population gets a chance to live. Farms are developed out of deer pastures, cities are built by the reedy lake, and all the machinery of our complex life gets into motion. In the last three quarters of a century, Canada has advanced from the reaping hook and cradle to the modern harvesting machine—from a wilderness to a great empire.
On the Border of the Wild

A Moose Team in Northern Canada

Penetrating the Wilds of Northern Canada
Modern Plowing Outfits

Turning Eight 14-Inch Furrows with a 45-H.P. Oil Tractor

Modern Plowing Outfits

Making the Acres Smile
Virgin Prairie in Northwest Canada

Operating Disk Harrows with an Oil Tractor

Plowing and Preparing the Seed Bed
Drilling Wheat

The Disk Drill in Canada

In the Shadow of a Canadian Forest
Virgin Prairie in Northwest Cana

Operating Disk Harrows with an Oil Tractor

Plowing and Preparing the Seed Bed
In the Shadow of a Canadian Forest

Drilling Wheat

The Disk Drill in Canada
Dominion Government Experimental Farm, Brandon, Manitoba

A Field of Bearded Wheat in Canada

Cutting Oats near Hamilton, Ontario
A Field of
Shocked Wheat in
Western Canada

Along the Shore of Lake Ontario

Harvesting Oats in Ontario
Threshing Scene in Western Canada

Harvest Scene in Manitoba, Canada

Corn in Eastern Canada
Oil Tractor
Operating Binders

Haying Time in Quebec

Home from the Field
Harvest Time in Picturesque Italy
In 1909, Russia forged ahead of the United States as a producer of wheat, and was in the lead again in 1910. According to Dornbusch's List, Russia, including Siberia, is again in first place with a production of about 730,000,000 bushels. France is the second largest wheat producer in Europe, the yield in that country in 1912 aggregating 335,000,000 bushels. Hungary is in the third place with a crop of a little less than 200,000,000 bushels. In 1912, Italy produced a wheat crop yielding more than 165,000,000 bushels. Turkey-in-Europe harvests a crop yielding 136,000,000 bushels. The United Kingdom last year produced only 56,000,000 bushels, and imported considerably more than 200,000,000 bushels. The total European wheat crop, including Russian Siberia, in 1912 aggregated more than 2,000,000,000 bushels. Wheat and rye are the most influential factors in drawing gold away from the money centers of Europe. Taking the world as a whole, if we except the Orient, wheat is the greatest distributor of money, and as such has the most to do with maintaining the commerce of the world. Food, however, is the chief end of wheat, and the bread-eating countries now consume 3,000,000,000 bushels annually. The importing countries buy 500,000,000 bushels yearly. The world's consumption of wheat is increasing at the rate of about 100,000,000 bushels a year, and this increase is the result of gain in population.
Harvesting a Heavy Crop of Rye, near Falkland, Scotland

Harvest Scene in England

Heavy Crop of Wheat near Manchester
Scene near Rothbury, England

Harvest Time in the Highlands

Stacking Wheat near Dundee
Bonnie Scotland near Wallace's Monument

Making Hay in England

The Environs of Birmingham
Plowing with an Oil Tractor in Russia

The Grain Drill in Russia

Harvest Time near the Ural Mountains
Russia is Adopting Advanced Methods of Harvesting

The "lobogreikas" in the Field near Moscow

Cutting a Heavy Crop with the Reaper
Mowing on the Steppes of Russia

Along the Volga River

Wheat for Export, Odessa, Russia
Hay Loader at the Base of the Alps, Switzerland
Plowing near the Jungfrau

A German Wheat Field

A Modern Binder in Germany
A Threshing Scene near Hamburg

The Reaping Machine in Belgium

Marketing Grain in Southern Germany
Estate Ex.-President Fallières, Loupillon, France

Harvesting Wheat in France

A Plowing Scene in France
Harvesting Scene in Southern France

A Beautiful Farm Scene

Threshing Scene in France
Modern Binders near Christiania, Norway

On the Estate of Emperor Franz Josef, Austria

Threshing Scene in Hungary
Mowing Machines on Large Estate in Italy

Sicilians Harvesting with Reaping Hook

Reaping Machines in an Italian Wheat Field
Modern Binders in Italy

Harvest Scene near Milan, Italy

Harvesting in Greece
Harvest Time in Dalarne, Sweden

Harvest Scene in Finland

Farm Scene in Denmark
Cutting Wheat in Navarre, Spain

The Reaper in Portugal

Harvesting in Northern Spain

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A Typical Holland Scene
A Rice Farm in Ceylon.
Preparing the Field for Planting
Asia embraces Japan, Siberia, China, India, Turkey-in-Asia, Arabia, and numerous islands, including the Philippines. India holds third place among the wheat producing countries of the world, with a crop of 368,000,000 bushels. Modern methods and modern machines have not yet been introduced to any measurable extent, and as soon as they are, India will become a considerable factor in commerce. It may be interesting to note in passing that the first blast furnace in India has just begun operations, and steel rails are now being produced. This means much for the Orient. China grows little wheat outside of Manchuria, which gives some promise of becoming an important wheat growing country. Neither wheat nor flour is imported to any extent, and so far as can be judged at this time, China will not soon become a wheat-eating country. Japan produces about 24,000,000 bushels of wheat yearly, having more than 1,000,000 acres growing this cereal. While the total area of Japan is nearly 100,000,000 acres, only about 15,000,000 acres are under cultivation, and the island is of much interest to us because of the increasing volume of its imports of American wheat and flour shipped from the Pacific Coast States. Asia will inevitably become a larger market for American and European manufactures.
Wooden Plows in India

Plowing in Ceylon

Harvesting with the Reaping Hook in Central India
Salesman Entering Allahabad, India

The Native Indian Cart

Carrying Cotton to Market
The Disk Harrow in India

Zebu Drawing Spring Tooth Harrow

Smoothing Harrow in the Field
In Central India

Utilizing the Zebu in India

The Hay Rake in India
Operating the Reaper with Zebus in India

Harvest Scene near Allahabad, India

Modern Reaper in India
Plowing a Flooded Field in Japan

Harrowing a Rice Field near Manila

Preparing Rice Field for Planting in Japan
Rice Planters at Work in Japan

Japanese Threshing Machine

A Japanese Farmer
A Cart Load of Rice, Manila

Land Roller Used in Philippine Islands

Tramping Out Grain, Mount of Olives, Palestine
A Siberian Harvest Scene

Hay Press on the Steppes of Siberia

A Ferry Boat on the Obi River, Siberia
The Modern Binder in Central Siberia

In a Siberian Wheat Field

Harvesting near Omsk, Siberia
Dromedaries are used as draft animals in Siberia.

Along the shore of the Obi River.
Planting Bananas in the Belgian Congo, Africa
Africa is a continent of magnificent distances, it being the largest of the three great southward projections from the main mass of the earth's surface. Excluding the islands, this continent includes 11,262,000 square miles. Algeria and Tunis—the two North African colonies—are of considerable importance, Algeria producing from 20,000,000 to 50,000,000 bushels of wheat annually, 4,000,000 to 6,000,000 bushels of which are exported. Tunis grows from 4,000,000 to 10,000,000 bushels, bringing the total maximum production of this part of Africa up to about 50,000,000 bushels. In this part of the world, harvest begins in May and ends in June, while the seeding time is in September and October. In Egypt, about 6,500,000 bushels of wheat are produced. The imports of that country now amount to from 2,500,000 to 3,000,000 bushels of wheat annually. Morocco and Tripoli are unimportant either in the amount of wheat grown or the imports of wheat and flour. South Africa is a much more important part of the country commercially, although little wheat is grown there—nearly all of the wheat and flour being imported from Australia.
The Sahara, Africa

Wagon Shop at Nairobi

Wagon Makers at Nairobi
Spring Tooth Harrow in Tunis, North Africa

Arabs Reaping Grain near Setif, Algeria

A Header with Sack Attachment in Algeria
Modern Binder in Algeria, near Ain Kersha

Environ of Cape Town, South Africa

Hauling Wheat near Nairobi, British East Africa
A Stripper Harvester in Australia
Owing to the small population and relatively large exports, Australasia, producing a wheat crop of 88,800,000 bushels, 8,000,000 of which comes from New Zealand, is almost as important in the markets of importing countries as India with a crop of 368,000,000 bushels. Australasia exports nearly half of its total yield, whereas India, after feeding her teeming millions, has little left for export. Because of the severe droughts, Australia is almost as uncertain in the matter of crops as India. During the last two decades, Australia has had a number of crop failures which made it necessary to import wheat. Australia exports considerable flour, as well as wheat, to South Africa. However, the greater part of the wheat export goes to the United Kingdom; Germany, France, and Belgium also receive some. In April, Australian grain shipments begin to arrive in Europe, shipments from Argentina having arrived a month earlier. Seeding time in Australia begins in May and continues through June, while December is the harvest month; in New Zealand, which is farther south, the harvest comes six weeks later.
Seeding Time in Australia

New Zealand Flax in Bloom

Cabbage Tree in New Zealand
Front View of the Stripper Harvester

In the Antipodes

Rear View of the Stripper Harvester
Scene Near Palmerston in Australia

The First Day of Harvest

Modern Binder in New South Wales
In the Field—near
Port Fairy, Australia

Harvest Time in Australia
An Australian Harvest Scene
Stacking Hay in Argentina, South America
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South America is among the large wheat-producing countries of the world. In 1909, Argentina exported more flour and wheat than the United States—and this fact has led to an erroneous impression as to the relative production of wheat in the two countries. About 50,000,000 acres are under cultivation in Argentina. Of the cultivated area, about 30,000,000 acres are in grain, 15,000,000 in alfalfa and other grasses. According to statistics prepared by the United States Department of Agriculture, the wheat production of the world during 1912 was 3,745,600,000 bushels, of which the United States furnished 720,000,000 bushels, and Argentina 200,000,000 bushels. In other words, the United States produced approximately 20 per cent of the world's wheat crop, while Argentina produced about 5 per cent. The United States has been exporting about 15 per cent of its total wheat crop, while Argentina exported 80 per cent of its production. It is this difference in the proportion of the production exported that has led to the erroneous impression of Argentina's total wheat crop. Chili and Uruguay grow some wheat, and there is considerable acreage in Ecuador and Bolivia that no doubt will be made to yield abundant harvests as soon as modern methods are introduced.
On the Road to Buenos Aires with Wheat

Reapers in Argentina, South America

Mowing Machine in Uruguay
Mowing Machines in a Chilean Clover Field

Hauling Hay to the Stack

Hauling Hay to Market
Bullocks Used
as Draft Animals
South America

A Battery of Binders in an Argentina Wheat Field

On the Pampas in Argentina
A Wheat Field in Argentina

The Header Binder in a South American Wheat Field

Operating a Header in South America
Hauling Wheat to
Market near
Buenos Aires

Wheat Ready to be Marketed

The San Roque Church,
Andes Mountains
View of Buenos Aires from the Water Front

Warehouses in Buenos Aires

View of the Harbor at Buenos Aires
Cowboys in Argentina

A Country Estate in Argentina

Mounted Police in Argentina
Harvesting with the Reaping Hook, Mexico
Under this caption we include Mexico, Cuba, and the Philippine Islands. Mexico usually produces from 15,000,000 to 20,000,000 bushels of wheat annually, and imports about 1,000,000 bushels. Some corn is also grown. Cuba purchases 500,000 barrels of flour annually, in addition to a large quantity of corn meal. Mexico is the home of the sisal fibre industry. In Yucatan the sisal plant is grown on large plantations embracing thousands of acres, and supplying nearly all the fibre used in harvesting the crops of the world. Manila fibre is procured from the Philippine Islands, which supply about fifteen per cent of the fibre used in the manufacture of binder twine. The illustrations show sisal and manila plants, and the methods employed by the natives to procure the fibre and prepare it for shipment. One page is given to illustrations of the desert where cactus, sage brush, mesquite, and verde trees grow. Enough of the earth's surface is overspread with desert to warrant us in presenting the illustrations—moreover, we believe that every student is interested in the harvest of the desert, many thousand acres of which have already been brought under cultivation by means of irrigation. It is to the desert and to the swamp that we must look for any material increase that may be made in the arable area.
A Sisal Plantation

The Sisal Plant

Cutting the Sisal Leaves
Bundles of Sisal Leaves

Hauling Sisal Leaves to Decorticating Mills

Unloading the Leaves at Mill
Exterior View of Decorticating Mill

Drying Sisal Fibre

Shipping Fibre—Progreso, Mexico
Water Buffalo and Native Cart,
Philippine Islands

Young Manila Trees

Native Hut in the Mountains
A Forest of Manila Trees

Cutting Down a Manila Tree

Removing the Leaf Stalks from the Tree
Drying Manila Fibre

Manila Leaf Stalks or Fibre Layers

Removing the Fibre from Leaf Stalks
Bringing Manila Fibre down from the Mountains

A Cart Load of Manila Fibre

The Wharf near Manila
Examining Fibre in Warehouse at Chicago

Preparing the Fibre for Spinning

Winding Twine into Balls
A Cuban Plantation

Plowing near Kingston, Jamaica

The Disk Harrow in Cuba
Harvest Scene
near the Pyramid of
Cholula, Mexico

Modern Binder in Mexico

Market Scene in Mexico
The Header at Work  
in a Mexican  
Wheat Field

Harvesting is Made a Holiday  
in Mexico  
A Farm Scene in Mexico
A Mexican Corn Field

A Corn Binder in Mexico

A Mexican Village—Sierra Madre Mountains in Distance
Stacking Wheat in Mexico
The Harvester Building, Chicago, U.S.A.
Norrköping Works, Norrköping, Sweden
Lubertzy Works, Moscow, Russia
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<tr>
<th>LOAN PERIOD</th>
<th>HOME USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
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