

Equally Efficient

**FOR WINDROW, STACK,
SHOCK OR BARN BALING**

The
ANN ARBOR
HAY & STRAW
COMBINE

M A K I N G H A Y



WITHOUT A PITCHFORK

**AVAILABLE WITH EITHER POWER
TAKE-OFF OR MOTOR DRIVE**

THE COMPLETE PICK-UP BALING PRESS

AN ANN ARBOR DEVELOPMENT



WHY THE PICK-UP BALING PRESS?

Hay is the second most important crop grown in the United States, both in acreage and in value. The annual production ranges from 70 to 90 million tons with a farm value of nearly a billion dollars. Value of the crop is determined by quality. Grades are based on the percentage of leaves and natural color and the absence of foreign material. No. 1 grades command a premium of from \$5.00 to \$10.00 per ton as compared with the lower grades. Also, straw and other farm by-products are annually becoming more valuable due to increased usage in mixed feeds, paper mill products, and so forth.

LABOR SAVED AND QUALITY IMPROVED

The one important factor in the production of these crops is the cost of the labor involved in harvesting. The great need for a labor saving, quality improving machine such as the Ann Arbor Hay & Straw Combine is therefore apparent. Through its use, the crop is automatically converted into smooth, compact bales as it is gathered from the ground, all ready for shipment or for storage in one-fifth the space required for loose hay. In addition, it is in the most convenient form for handling or feeding. The leaves are retained on the stems instead of being shattered off and left in the field. The chaff and dirt sift through and are left in the stubble. The Ann Arbor Hay & Straw Combine operates with a three man crew, at almost double the capacity of even our own belt power presses. Result — substantial saving in valuable time and dollars.

ANOTHER IMPORTANT NEED

The Ann Arbor Hay & Straw Combine, in addition, offers the only practical and economical means of salvaging the straw dropped in windrows by the Combine Harvester. The straw may be allowed to lay on the stubble, and can be picked up and baled with the Pick-Up Baler at any convenient time after harvest, at a negligible cost.

Ann Arbor
THE BALER FOR BUSINESS

ANN ARBOR • • • FIRST IN THE FIELD

Twenty-five years ago the average operator would have scoffed at the idea that hay could be harvested, baled, and stored without the aid of a pitchfork. Ann Arbor undertook to accomplish just that result more than a decade ago, and in early 1930 the first Pick-Up and Power Take-Off driven baling press was announced — JUST TWO YEARS BEFORE ANY SIMILAR MACHINE WAS OFFERED TO THE TRADE.

PERFECTED FROM ACTUAL FIELD EXPERIENCE

Slat conveyors, ground driven pick-up unit, offset back wall of cross conveyor, and ground shoes on the pick-up unit of this early machine have long since been replaced with positive drag chain conveyors, the more efficient full floating power driven pick-up unit, non-obstructive vertical cross conveyor back wall, and ground gauge wheels on the pick-up unit set well back of the pick-up cylinder to avoid pinching the edges of the windrow to the ground.

High speed babbitt, self-aligning, or roller bearings equipped with high pressure lubrication fittings are used throughout this modern machine, thus reducing friction and power required to the point that any of the popular makes of light 2-plow tractors will handle it satisfactorily, with either the power take-off or motor drive. All units are equipped with positive chain drives and are provided with safety slip clutches. All gears, sprockets, and revolving mechanisms turn on their true centers — NO ECCENTRIC GEARS, TOGGLE JOINTS OR OTHER STRANGE MECHANISMS TO CAUSE VIBRATION, EXCESSIVE WEAR, AND BREAKAGE.

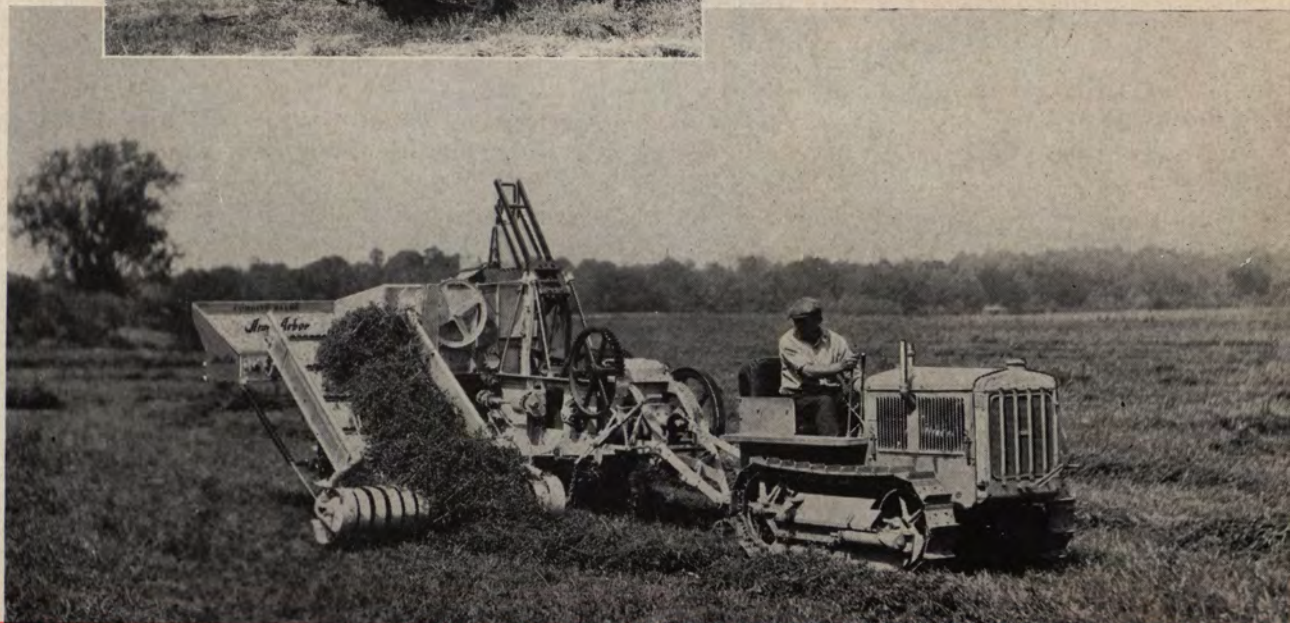
The broad experience gained in the development of this machine and in observing its operation under all conditions has enabled us to perfect it to a point of efficiency not attained in any competitive machine. Consider these facts in choosing your Pick-Up Baler and buy the original Ann Arbor.



THE FIRST COMMERCIAL PICK-UP BALER
BUILT BY ANY MANUFACTURER.

LEFT — RECOVERING STRAW DROPPED BY
THE GRAIN COMBINE.

LOWER — PICKING UP AND BALING
ALFALFA.



Ann Arbor
THE BALER FOR BUSINESS

SUPERIOR PERFORMANCE AND

TIME TESTED DESIGN

Embodied in the construction of the Hay & Straw Combine is the old reliable Ann Arbor "40" baling unit, backed by fifty-five years experience in the building of Baling Presses. With its extra long feed opening, long plunger stroke, quick return feeder mechanism, and various other original Ann Arbor features it is capable of larger capacity than other makes which are built to lesser dimensions.

In combination with the flexible, highly efficient pick-up unit and the positive action conveyor feeder and special automatic sav-a-man force feeder, a definitely higher tonnage output is accomplished—results not possible to achieve with the ordinary baling press even though it is equipped with pick-up unit, conveyor feeder and an extra member of the crew required to assist in feeding the flow of hay into the baler.

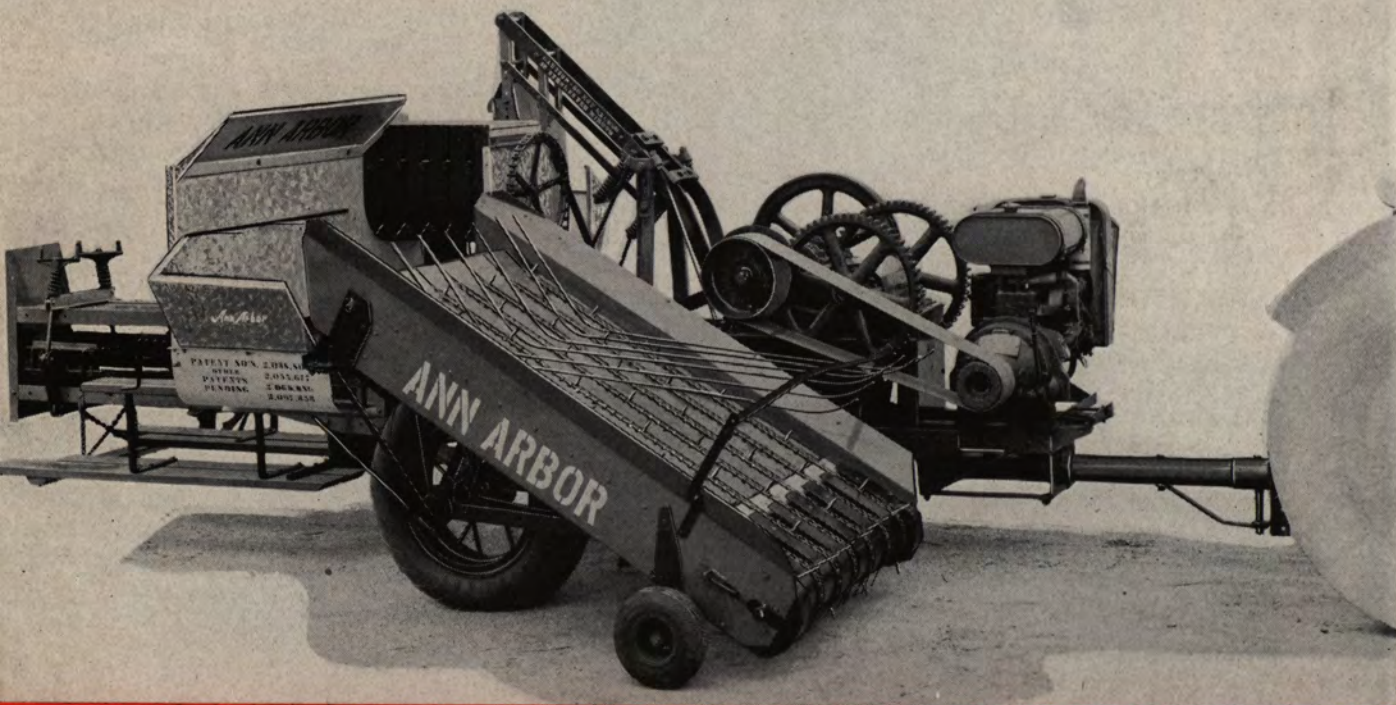
RUGGED CONSTRUCTION

The entire frame of the baler is of fabricated steel construction, hot riveted with air hammers, trussed and braced to insure positive alignment of working parts at all times. Narrow tread and 12" tire, roller bearing wheels carrying the machine on a single axle increases its flexibility in the field and reduces the draft so that the power supplied by even the old style 2-plow tractors is ample for handling it.

MORE EFFICIENT PICK-UP UNIT

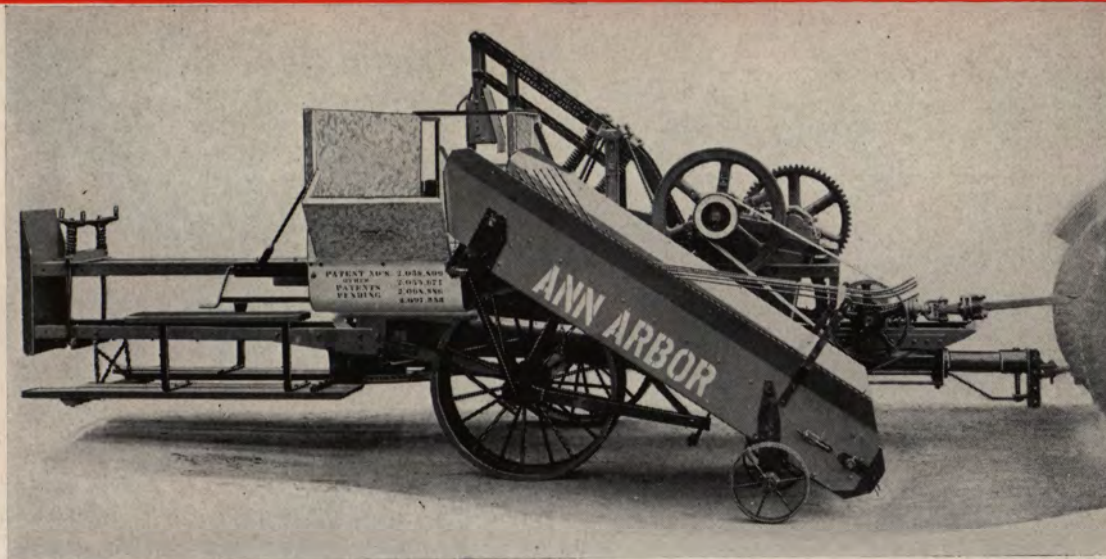
The power driven pick-up unit operates at regular speed when turning either right or left. The long spring tines gently lift the windrow from the stubble on to the solid bottom of the pick-up unit. The hay cannot wind around the pick-up cylinder as the spring tines are withdrawn through the strippers at a right angle with the flow of hay, and the tine links of the drag chains convey the hay in a positive, unagitated flow into the cross conveyor and into the hopper of the baler.

THE ANN ARBOR HAY & STRAW COMBINE. Equipped with 4-cyl. Engine Drive, Pneumatic Tires and Roller-Bearing Wheels Twin Gears and Twin Pinions Throughout. Three sizes: 14x18, 16x18, 17x22.



Ann Arbor
"THE BALER FOR BUSINESS"

LONGER LIFE AT NO EXTRA COST!



THE ANN ARBOR HAY & STRAW COMBINE

Standard Single Top Gearing with Twin Bull Gears and Pinions. Power Take-Off Drive, 12" Steel Tire Roller-Bearing Wheels.
Three sizes: 14x18, 16x18, 17x22.

The center ridge wheel prevents the spring tines digging in over uneven ground. The balancing spring supporting the full weight of the pick-up unit allowing **FULL FLOATING ACTION**, insures clean pick-up regardless of the contour of the ground—no hay is left in the field.

The pick-up unit is of ample width for the largest windrows and **THE OVERALL WIDTH OF THE MACHINE IS SUCH AS TO ELIMINATE THE NECESSITY FOR DISSEMBLING THE MACHINE IN PASSING THROUGH ORDINARY WIDTH FARM GATES OR IN TRANSPORTING IT ON THE ROAD FROM ONE FIELD TO ANOTHER.** Safety slip clutch drive insures against excessive strains.

POSITIVE ACTION CROSS CONVEYOR

The cross conveyor, as well as the automatic Sav-a-man force feeder, is controlled by a lever within easy reach of the wire tier. The operator may start, stop, or reverse both the cross conveyor and Sav-a-man force feeder instantly at any time by throwing the lever. By making a simple adjustment on the transmission gear box drive the pick-up unit may be stopped or started with the cross conveyor and all with the one control lever. Controls for stopping and starting the pick-up unit and also for raising it from the ground when the occasion demands may be provided for the tractor driver.

SAVES ONE MAN OF THE CREW

The automatic Sav-a-man force feeder eliminates one member of the crew, confining it to the tractor driver and two wire tiers. Insurance against the need for a fourth man is further provided for in the hay booster mechanism in the back wall of the cross conveyor. The action of both the force feeder and hay booster is positive and is synchronized with the speed of both the pick-up unit and cross conveyor. They effect instantaneous separation of the hay stream for dropping the head blocks. Only one idle stroke is ordinarily required for dropping the block, and the flow of hay into the hopper of the press starts the instant the control lever is thrown into forward position and without manual assistance. The hay booster and automatic force feeder are optional features.

POWER TAKE-OFF OR MOTOR DRIVE

All sizes of the Hay & Straw Combine are available with either auxiliary motor or power take-off drive. The highest quality, four cylinder industrial power units capable of developing from 20 to 22 horse power or special design heavy duty Timken bearing equipped power take-off gear case and universal joint assemblies are furnished.



From Palestine to California

and throughout the world where baling is done, you will find Ann Arbor Balers making more and better bales at a lower cost per ton.

① Hilly fields present no obstacle to the Ann Arbor. Garner Bros. Farm near Davenport, Iowa.

② This ANN ARBOR handles annually several hundred acres Alfalfa in the Imperial Valley, California.

③ Unz Bros., Reddick, Ill., baling straw dropped in windrows by the Grain Combine.

④ Hermann Schmidt, Owaneco, Illinois, operating his two Ann Arbors in one field.

⑤ A splendid example of uniform square bales produced by the Ann Arbor.

⑥ Picking up and baling Oats Hay in Valley of Gallilee, near Haifa, Palestine.

⑦ Stationary baling with an Ann Arbor pick-up baler near Casa Blanca, Morocco, North Africa.

⑧ An Ann Arbor Combine mounted on truck equipped with bale loader. Milford, Illinois.

Left side view with two wheel front truck. Note reinforced frame and running boards with seats for wire tiers.



Extra Value FOR

LARGE CAPACITY CROSS CONVEYOR

Fig. 1. The hay is conveyed by means of special type drag chains and tine links. The cross conveyor is of ample width to handle the large volume of hay brought to it by the wide flexible pick-up. Vertical back wall equipped with hay booster tines prevents lodging and insures positive movement of the hay stream at all times. This modern unit together with the special automatic force feeder eliminates one man from the crew and saves its cost every thirty days of operation. The combined action of these units insures positive parting of the hay stream and makes block dropping easy. Action of the Sav-a-man feeder is gentle and positive, no hay winding beaters, crank shafts or other leaf shattering devices employed — AN EXCLUSIVE ANN ARBOR FEATURE.

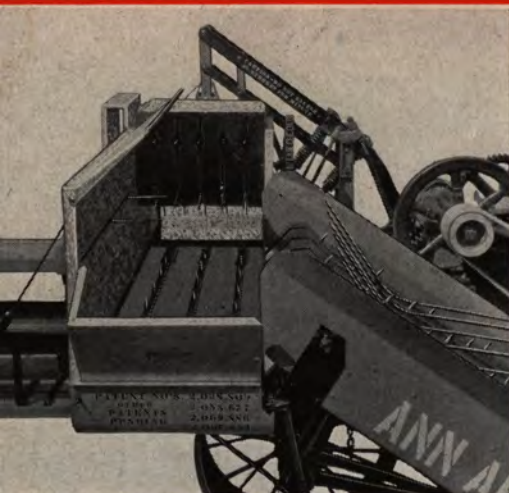


Fig. 1. Cross conveyor with automatic sav-a-man force feeder and hay booster units.

CLEAN PICK-UP SAVES LEAVES

Fig. 2. The full floating power driven pick-up unit, ANOTHER EXCLUSIVE ANN ARBOR FEATURE, operates at the desired speed regardless of ground travel, this feature being especially advantageous in turning and in rough ground. Pivotaly mounted off the main axle and equipped with adjustable ground gauge wheels and center ridge wheel, the strong balancing spring completes the effect of a full floating unit. Closely spaced SPRING TINES PICK-UP WINDROWS WITHOUT SHATTERING OFF LEAVES. The crop is elevated by file hard drag chains and tine links, assuring positive movement of the hay stream. Replaceable wood shoe reduces wear on chains and bottom of pick-up. Convenient control enables operator to stop pick-up unit without stopping machine.



Fig. 2. Front View Pick-up Unit. Full floating—Balanced off main axle.

The wind guard makes possible the combining of hay or straw on windy days. For stack baling the pick-up unit serves as an automatic feed table by removing the wind guard and raising the lower end, whereas the ground driven pick-up is not only useless in stack or stationary baling but badly in the way.

POWER DRIVE RUNS IN OIL

Fig. 3. The gears and clutches for transmitting power from the bull gear to drive the pick-up, cross conveyor and automatic force feed units are housed in a dust proof case and run in oil. The shafts are high carbon and the assembly is equipped with safety clutches throughout. Positive forward, neutral, and reverse action is accomplished by means of a single control lever conveniently located to the operator.

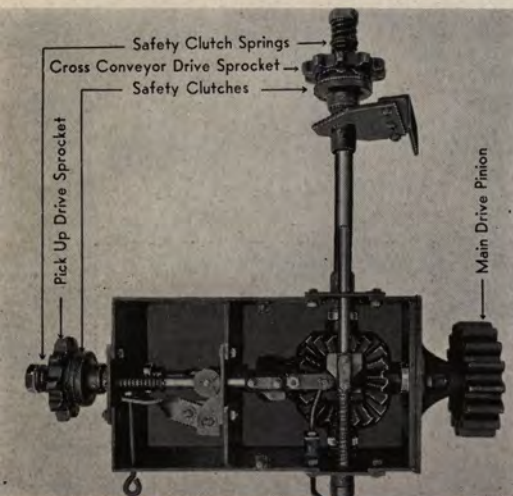


Fig. 3. Power Drive for Cross Conveyor and Pick-Up.

PROPER GEARING DESIGN SAVES POWER

Fig. 4. All models of Ann Arbor Baling Presses are available with either standard single or twin top gearing. All gears and pinions are made of high tensile alloy metal containing a high percentage of

Ann Arbor

YOUR DOLLAR

steel to give maximum strength and durability and at the same time reduce weight. All gears run on their true centers — no eccentric movement to cause vibration and reduce ground clearance. Gears are carried on large diameter shafts equipped with wide high speed bearings which insure long life and light running.

One piece top boxes and adequately trussed and braced frame insure perfect alignment of working parts at all times. The large bull gears are given double life by providing two points for connecting the pitman.

RUGGEDLY CONSTRUCTED POWER TAKE-OFF ASSEMBLY

Fig. 5. The power take-off drive eliminates an extra power unit. Power is transmitted from the tractor to the baler through the special designed, heavy duty, Timken bearing equipped assembly with cut steel heat treated bevel gears operating in oil. The universal joint drive shaft assembly is equipped with both "Free Wheeling" and safety slip clutches to insure against excessive strains and is designed so that the angularity may be divided between the two universal joints, enabling shorter turns. The entire unit was especially designed by us for heavy work of baling — not a light duty assembly originally designed for a machine requiring much less power. For changing to motor drive it is only necessary to remove and replace four bolts. To adjust belt merely loosen bolts and slide power take-off gear case or motor forward or backward.

STANDARD ANN ARBOR FEATURES

Fig. 6. The extra length of feed opening, plunger stroke, and tying chamber in combination with the wide adjustable feeder head supplemented with the auxiliary feeder blade—that cannot chop through the feed regardless of how light and fluffy, but takes the full charge to the bottom of the compression chamber—assures a full sized feed at every plunger stroke and materially increases the capacity of the machine.

The full length bearings in feeder head and arms reduce wear to a minimum and assure longer life. The strong flexible feeder relief springs guard against breakage and assure safety for the operator. The safety collapsible divider block bracket enables the operator to avoid breakage of divider blocks.

SEMI-AUTOMATIC BLOCK DROPPER ANOTHER ANN ARBOR FEATURE

Fig. 7. A special sliding type block dropper, semi-automatic, encloses hopper and prevents chaff from sluffing over bale chamber and operators. Short quick movement to drop divider block enables the performance of this operation with a minimum of time and effort.



Fig. 7. Semi-Automatic Sliding Type Block Dropper.

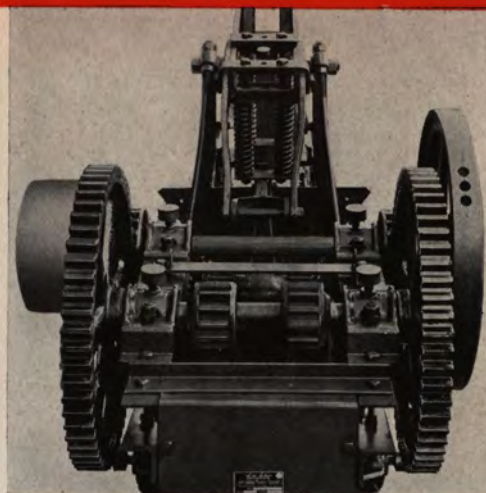


Fig. 4. Twin top gears and pinions available as optional equipment.

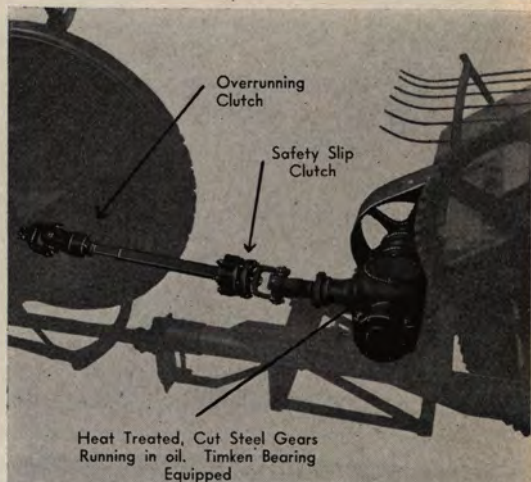


Fig. 5. Power Take-Off Gear Case and Universal Joint Assembly.

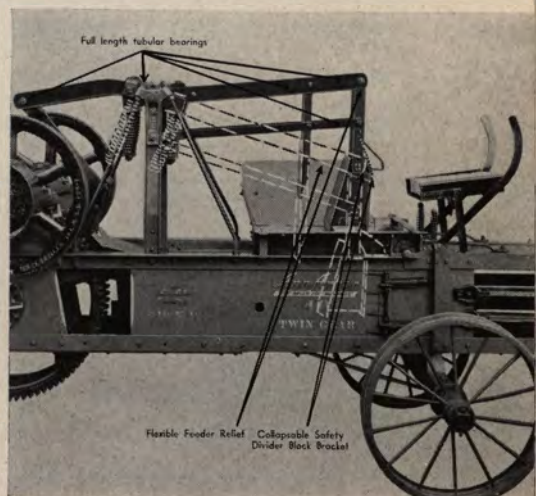


Fig. 6. Standard features on all Ann Arbor models.

Ann Arbor

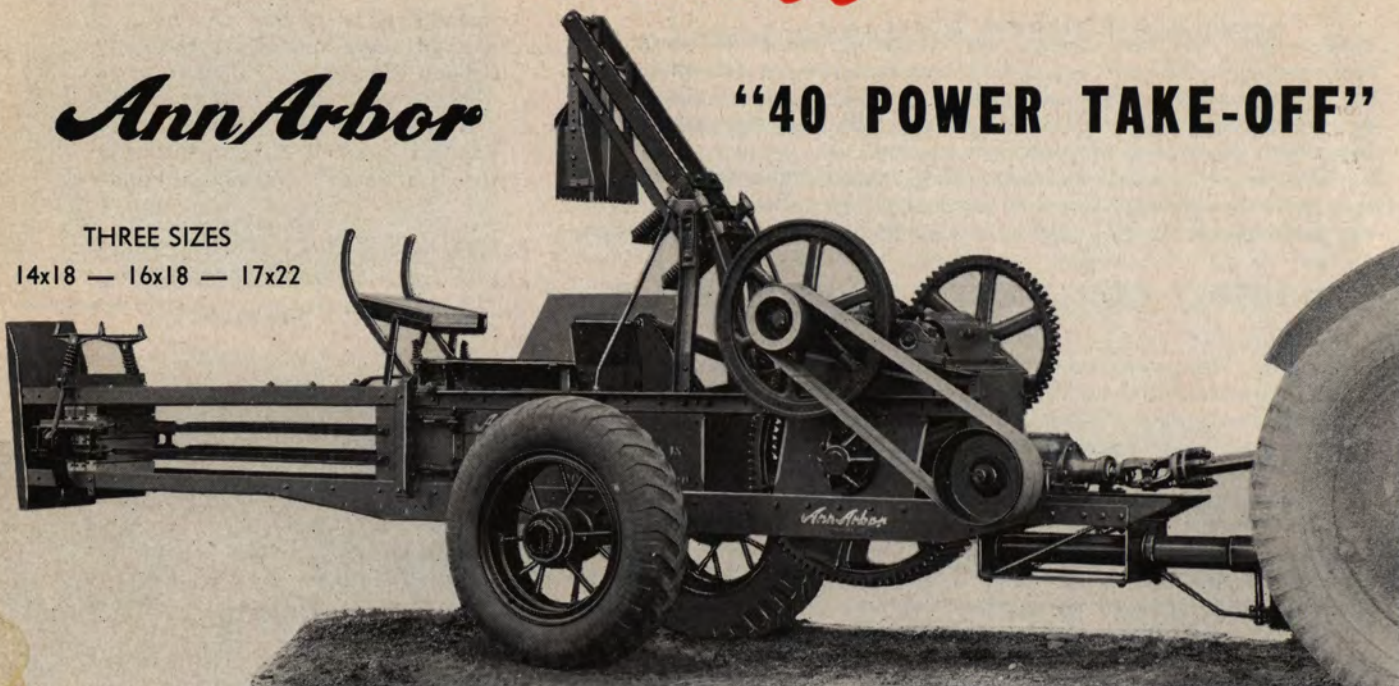
Economy AND Efficiency WITH THE

Ann Arbor

"40 POWER TAKE-OFF"

THREE SIZES

14x18 — 16x18 — 17x22



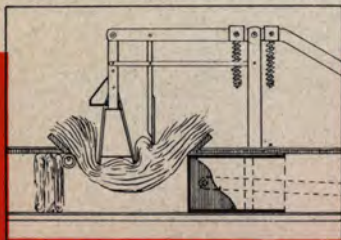
This machine is the baler unit of the Hay & Straw Combine equipped with plain hopper instead of cross feed and pick-up units. It is widely used for pitching in windrows or shocks as it is pulled through the field as well as for baling from stacks and barns. No loss of time in lining up belts when machine is moved.

This press is unusually strong and light in weight. The power take-off drive eliminates motor, which lessens original cost and considerably reduces operating expense. The same special Timken bearing power take-off assembly as is equipped on the Power Take-Off Hay & Straw Combine is used.

The wide tire wheels, equipped with roller bearings, make this machine a favorite with balermen for stack work in winter when the ground is soft and spongy. In the event the owner wishes to convert this machine into a Hay & Straw Combine, the frame is punched to receive this equipment and the pick-up and cross feed units may be added at any convenient date.

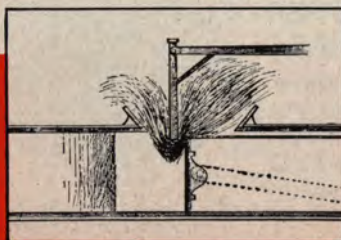
The Power Take-Off type of Baling Press was pioneered by Ann Arbor.

THE ANN ARBOR WAY—SMOOTH BALES WITHOUT TAILS



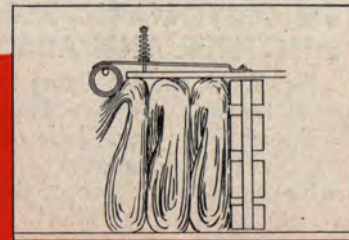
THE ANN ARBOR WAY

Big charges sent clear to the bottom. Action of auxiliary blade tucks full charge of hay below top of plunger.



THE ORDINARY WAY

Less capacity, hay sheared and loose.



THE ROLLER FOLDER

Positively folds the tail of each beat well down in center of the bale.

EVIDENCE THAT IS CONVINCING...

IDEAL FOR IRRIGATED FIELDS

Walter J. Michel of Edgemar Farms, Venice, California, writes:—"After operating our Ann Arbor baler for a week, the three biggest advantages we experienced were the ease in turning and crossing high borders, a condition which caused considerable trouble with other pick-ups; the cleanliness and smoothness with which the pick-up elevated the hay to the self-feeder; and the self-feeder, which gives a uniform feed at all times. The self-feeder, alone, is an outstanding feature because of its great labor saving quality.

Because of the perfect performance in places where other balers faulted, we are convinced that in purchasing the Ann Arbor Combine Baler, we own the finest baler available on the present market."

CAPACITY FAR BEYOND EXPECTATIONS

John P. Becker, Stanford, Illinois, says:—"The boys and myself are very well pleased with our new Ann Arbor Pick-Up Baler. We were very greatly surprised with the amount of work put out per day."

REPAIR EXPENSE IS NEGLIGIBLE

From the large alfalfa acreage in the Mississippi Delta, Mr. H. Kittle of Shaw, Mississippi, writes:—"I am starting in my third season with my Ann Arbor Hay & Straw Combine, I purchased from you in 1935.

I have baled approximately thirty thousand bales of alfalfa hay, and a good many tons of soy bean hay. My repair bill has been practically nothing to speak of, in fact I have never owned a piece of machinery that gave such service, with as little upkeep as your Hay and Straw Combine. I would hate to think that I would ever have to go back to the old stationary press."

A WORD FROM FAR OFF PALESTINE

* * * "We wish to add that since writing you last our customers have again expressed their complete satisfaction with the work of their Ann Arbor Balers."

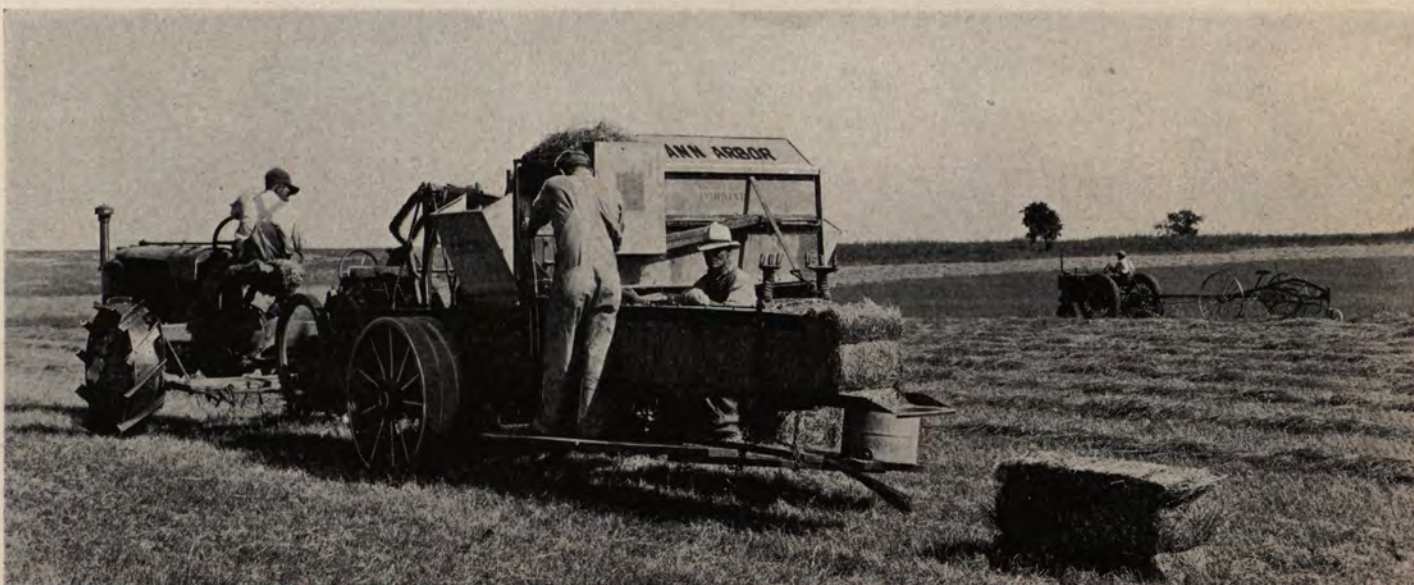
Engineering Corporation of Palestine Limited
Nazareth Road
Haifa, Palestine."

35 TO 40% MORE LEAVES BRING PREMIUM ON MARKET

Mr. F. H. Hauber, Rushville, Missouri, writes:—"I am well pleased with the work my Ann Arbor Hay & Straw Combine does and the way it does it. I have been selling my hay at a higher price per ton just because it has all the leaves in it.

"Mr. Dillinger at the Gee Bee Mills in St. Joseph says he can get 35 to 40 per cent more leaves out of my hay to make alfalfa leaf meal than he can out of the hay baled the old way. That is why he can pay me more for my hay."

Four men operating five machines including an Ann Arbor Pick-Up Baler, near Garnett, Kansas.



THE COMPANY BEHIND THE PRODUCT

• an Important Consideration •



"To build a good product, always with an eye to high quality coupled with great efficiency and to offer it at a reasonable price." Such has been the Ann Arbor policy for 55 years.

Well and favorably known throughout the United States and all foreign countries where baling is done, Ann Arbor Baling Presses, year after year, have received the support of those farmers and operators who demand the best.

Under the direction of our engineers, research work is constantly being conducted, including tests in the field under every operating condition, with the thought of continually adding further refinements to our machines whenever and wherever possible. The maintenance of our present reputation and standards require this work, and it is being done systematically and unsparingly.

Such is the organization behind Ann Arbor Products. That is why Ann Arbor buyers are confident that they are securing the finest Baling Equipment that human ingenuity thus far has evolved.

The Ann Arbor Guarantee speaks for itself. It is your insurance that everything we say in this catalog is right and true, and based on fact. The quality is there, the workmanship is there, the results are sure. You take no chances and we take no chances. The Ann Arbor Baler will more than substantiate our every claim, and back of it is a concern financially able and willing to make good. You are protected by our agent as well as by us; and where we stand financially and in a business way can be proven by merely asking your banker to investigate. It is the strongest guarantee, backed up by the oldest exclusive manufacturer of baling equipment in the world.

THE ANN ARBOR MACHINE COMPANY

S H E L B Y V I L L E , I L L I N O I S , U . S . A .

Manufacturers of Baling Presses Since 1882

Pick-Up - Power Take-Off - Tractor Belt Power - Horse Power

FRICK COMPANY, INC., WAYNESBORO, PENN.

Eastern Distributors

Frick Branch Offices are located at the following points:

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Pittsburgh, Pa., 821 Behan St. N. S.
Avon, N. Y.
Williamsport, Pa., 1204 1/2 Wash. Blvd.
Easton, Pa., 3500 Wm. Penn Highway
Harrisburg, Pa., 75 S. Tenth Street

Dover, Del., 35 West Street
Richmond, Va., 1811 Highpoint Ave.
Charleston, W. Va., 117 Virginia St. W.
Nashville, Tenn., 115 Fifth Ave. S.
Knoxville, Tenn., 123 State St.
Salisbury, N. C., Kerr Street

Columbia, S. C., 914 Washington St.
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