

SANDWICH FARM ELEVATORS

1856



1918

SANDWICH MANUFACTURING CO. SANDWICH, ILLINOIS

1856

1918

SANDWICH MANUFACTURING COMPANY

ESTABLISHED 1856

INCORPORATED 1867

BUILDERS OF

FARM GRAIN ELEVATORS

CORN SHELLING MACHINERY, GASOLINE AND KEROSENE ENGINES, HAY PRESSES,
HAY LOADERS, MANURE SPREADERS, HAY RAKES, FEED MILLS, HORSE POWERS, ETC.

BRANCH HOUSES AND JOBBERS

SANDWICH MANUFACTURING COMPANY

Council Bluffs, Iowa Cedar Rapids, Iowa Kansas City, Missouri
Peoria, Illinois

TRANSPER STOCKS

Fort Dodge, Iowa Mason City, Iowa
Sioux Falls, South Dakota Minneapolis, Minnesota

JOBBERS

WEBER IMPLEMENT & AUTO COMPANY St. Louis, Missouri
B. F. AVERY & SONS New Orleans and Shreveport, Louisiana
B. F. AVERY & SONS Memphis, Tennessee and Atlanta, Georgia
B. F. AVERY & SONS PLOW CO. Dallas and San Antonio, Texas
J. & J. DRYSDALE & COMPANY Buenos Aires, S. A.
MITCHELL, LEWIS & STAVAR COMPANY Portland, Oregon
Spokane, Washington and Boise, Idaho
PACIFIC IMPLEMENT COMPANY San Francisco, California
DIXON & GRISWOLD Los Angeles, California
C. W. KEITH Denver, Colorado

Factory and General Office: SANDWICH, ILLINOIS, U. S. A.

Cable Address: "SMADA." Use A B C and Western Union Codes

Muscle-Saving Machinery

In these days when work is plenty and labor is scarce and high, the "hired man problem" looms up like a specter on the busy farmer's horizon.

The farmer who provides himself with muscle-saving machinery not only gets the pick of men, but he cuts the corners of cost and time and makes more net profit on his crops than his neighbors who farm "by hand."

Foremost among the modern inventions for saving time, money and muscle is the Sandwich Farm Elevator—a machine that relieves farm help of the laborious, muscle-straining, back-breaking work of unloading corn and small grain from wagons to granaries, bins and freight cars.

This work comes at the climax of crop-gathering, when nerves and muscles are already strained to the breaking-point, and when every minute counts.

Probably as hard work as there is on the farm is where you, your family or hired hands have to shovel the corn into the crib. It means a constant bending, pushing, lifting and raising that tires the back and arms and makes every muscle of the body ache. It is exhausting, laborious drudgery for even the strongest men.

It's a job nobody likes and that most hired men despise. Yet such is the need of help and haste at corn husking time that even the young boys are forced to do this work that is almost too much for men.

It Pays to Save the Husker's Back

Good hired hands are hard to get and hard to keep. Plenty of jobs for them and they will go and work where modern methods and modern machinery are employed. A good hand is willing to

do a big day's work, but he naturally wants all the assistance he can get to do the heavy work. He is no longer satisfied to "work like a horse" when there is no necessity for it.

A corn husker can do a certain amount of work a day—whatever may be his daily average, 60, 70 or 80 bushels—there is a way to help him to bring up the average to 90 or 100 bushels a day.

This can be done without overtaxing his strength so that when the day's work is done he will not be exhausted and discontented and unfit for his best work the next day.

The Sandwich Farm Elevator

will accomplish this and save you and your hands all the strain and extra work, so that when you all go back into the fields you will feel fresh and ready to make things fly.

You can get work done quicker and cheaper if you own one of these outfits. In nearly all localities, huskers will work for less with a farm elevator than where they are expected to do the unloading with the scoop.

Makes Farm Life Attractive to Your Boys

If your own sons work on the farm, it is even more important to adopt the new and better methods made possible by labor-saving machinery.

If you had an elevator to handle the corn and grain, it would mean a big thing for your children. Hard and heavy work during the growing period is very likely to undermine their constitutions. And even if it does not permanently injure their health it tends to make them dissatisfied with farm life.

Make their work pleasant and easy and not only will they grow up to strong and sturdy maturity, but you will reap as much benefit as anyone. Less dissatisfaction, less sickness, less doctor bills and expenses—more and better work all along the line.

A hired hand eats as much and costs as much to keep if he only does 70 or 80 bushels a day as if he did 90 or 100.

That extra cost which you pay cuts down profits on every bushel of corn you raise.

Suppose you have a gang of huskers whom you pay a certain amount per bushel. With the elevator they will not only work for less money per bushel, but it always means that the whole job will be done quicker and more satisfactorily.

You'll get your corn in while in good shape and besides save a lot of money on the cost of feed and keep of huskers. You will be through with them days before you would if they had to spend a long time to shovel each load of corn with the scoop.

What Kind to Buy

Like all farm machinery, elevators are good, bad and "worse."

The big demand that has sprung up in every agricultural section for these aids to better and easier farming has had the natural result of putting a lot of cheap, flimsy, badly designed and poorly constructed machines on the market.

In buying a farm elevator, bear in mind that the machine has to do extraordinarily heavy work—must withstand a tremendous strain—must work rapidly and smoothly, with light draft—must be adaptable to a wide range of cribbing conditions.

A cheap elevator won't save you any money, for it will quickly rattle and shake itself to pieces and be a constant bill of expense on account of break-downs and cost of repairs.

When you buy a Sandwich Farm Elevator you get an outfit that is going to stand by you for years and years.

It is built by one of the largest and oldest farm machinery concerns in the country, whose reputation for honesty in manufacture is of the very highest.

There's strength, durability and guaranteed satisfaction in every Sandwich Farm Elevator.

A Household Name

The Sandwich Manufacturing Co. is known from one end of the country to the other, because wherever a farmer has bought one of our machines, whether it is a Hay Loader, Side Delivery Rake, Hay Press, Corn Sheller, Feed Grinder, Gasoline Engine or Farm Elevator, that farmer knows he's got the biggest value for his money that he can find.

There's sixty years of good reputation and experience back of our machinery and over a million dollars of resources to make every promise good. So buy the best, for it's always the cheapest. Buy what will do your work quickest and with the least of cost for repair. Buy from a manufacturer who will be in business next year and the next and the next—for years to come, so that you can find him if you ever need to have him make good to you.

The farmers who are making the big money—the ones who are constantly adding to their acreage or piling up a surplus in the bank—the ones who are getting the most out of life—the ones who are giving their children the best educational advantages are the farmers who take advantage of just such labor-saving inventions as the Sandwich Farm Elevator, which is fully described on the following pages.

Don't lag behind! Don't work at a disadvantage! Don't depend on muscle to do the work that the elevator will do better, quicker, and cheaper.

Sandwich Farm Elevators



The body of our Elevator is made of selected Cypress, well seasoned, and of excellent finish. We have thought it an item of interest to mention here our reason for using cypress.

History Tells Us

that as far back as when mankind began to erect permanent buildings and exercise judgment in the selection of woods best suited to varying conditions, Cypress was given preference because of its superiority in withstanding weather exposure.

Many of the great works of ancient builders which withstood the test of time for centuries are known to have been made of Cypress.

Lasts for Ages

The historic gates of Constantinople were made of Cypress and were on duty for eleven centuries. The Cypress doors of ancient

St. Peter's in Rome were in a perfect state of preservation after twelve centuries of constant use.

Coming a little nearer home, in 1640: Thomas Lyon built a house at Greenwich, Conn., and shingled it with Cypress, the house is used today as a residence, with no outside repairs of consequence. A Cypress water main in the City of New Orleans was removed recently in a state of perfect preservation after one hundred and twenty years of service.

In a trip to historical centers in New England and the South one sees scores of very old buildings, stretches of fence, etc., which have endured the elements because made of Cypress, and stand today as monuments to the exposure-proof qualities of that wood.

All farmers know of the great superiority of Cypress over other woods for construction of water tanks.

What Sixty Years Have Taught Us

In an experience of over half a century in the building of agricultural machinery we have learned the strengths and weaknesses of different materials for various purposes. We have learned that yellow pine, poplar and cottonwood, while good for many places, are not satisfactory when used in thin boards in machines much exposed to the weather. In the Sandwich Farm Elevator we have adopted Cypress as the best possible material for the elevator body or truck.



For the trucks, dump, power, etc., other woods are as good or better, but Cypress excels everything, wood or steel, for elevator body construction. It is "the wood eternal," and even without proper painting will outlast steel or any other wood available for that purpose, and when splendidly finished, as we paint the Sandwich Elevator, it stands in a class by itself, superior to any other in this particular.



Why We Use Cypress

"He who builds with Cypress builds but once," is the old saying, and we may well add: He who buys a Sandwich Elevator, made of Cypress, buys but once.

We do not employ Cypress from motives of economy, except as our long experience has taught us that the best is in the long run the cheapest, both for builder and buyer. We pay much more for Cypress than we would pay for yellow pine or other inferior woods, but our customers get the benefit; we charge no more for our product.

To Sum It All Up

Can you imagine construction more certain of long life under hard service than a Cypress Elevator Body, well supported and reinforced with steel and wood, painted with several coats of good, weather-resisting paint, and lined with heavy sheet steel, easily replaceable after long wear? The light, quick-rusting, sure-bending and denting steel elevators are not to be mentioned with it, and the cheaper wooden structures, while perhaps superior to metal, come far from equaling the Everlasting Sandwich Cypress Elevator.



The Sandwich Farm Elevator : The Elevator That Pays Its Way

No. 401. Twenty-Four Foot Sandwich Farm Elevator

See page 30 for directions "How to Order"

CYPRESS

Why buy goods made of perishable material when Cypress may be purchased for the same money?

The Sandwich Farm Elevator is equipped with Shelled Corn Grate, see page 7



Complete with Swinging Hopper, Wagon Dump and Two-Horse Power

Weight 2674 lbs.

Sandwich Farm Elevator Construction

The Sandwich Farm Elevators

are lined with heavy sheet steel. They are of ample width for fast elevating and are speeded to take the grain as fast as two horses can handle it on a Two-Horse Power.

Corn Cleaning Grate or Screen

Sandwich Elevators are now equipped with a Grate in the bottom of the first section, which very effectually screens out the shelled corn and much of the husks, silks, etc. The shelled corn is carried back on the "return board" and may be caught in a basket at the bottom. A steel cover for the grate is provided for use when elevating small grain.

Chain Tightener Brackets

The chain tightener and cast boot brackets on the Sandwich Elevators are built to withstand hardest strain on the longest elevator.

We invite comparison to similar parts used on other elevators.

Chain Steel Flights

The steel drags or flights extend clear across the elevator, leaving no chance for clogging at their ends. The attachment links are riveted to the center of the flights, giving the best possible pull. We use No. 55 chain in the elevator. The



Shelled Corn Grate

chain and plates, after they have discharged the ear corn or small grain, carry back on two narrow hardwood strips located at either side of the return board, which extends the full length of the Elevator; there is no wear whatever on the chain in its return, and as only an inch or two of the edge of the plate drags on the strips referred to the friction is reduced to a minimum. Between the two wooden strips referred to we use a sheet iron bottom, which returns to lower end of Elevator the little grain which may carry back and thus prevents it from scattering and wasting.

Self-Aligning Boxes

These boxes are heavy and strong and well proportioned, and are of the self-aligning type. No one should buy an Elevator of this class which uses a tight or fixed box.

The upper and lower shafts on Main Elevator are 1 3/16 inches in diameter, the lower shaft being squared to receive knuckle.

Malleable Hinge Couplings

The Standard length Elevator is made in two sections, and they are joined together with a strong, malleable hinge coupling which is securely bolted to the Elevator. Through the top and bottom of this hinge is a 4 1/2-inch bolt running parallel with the Elevator for the purpose of holding the sections closely and firmly together, making a perfect joint, one which prevents the Elevator from bowing or sagging. Each section of hinge extends back on the lower edge of Elevator side about 20 inches, giving a long, stiff bearing. See illustration on page nine.

About every four feet on the bottom and sides of the Elevator we place rigid braces or trusses made of heavy band or strap iron, which hold the lower or return board in proper position to the main Elevator.

The Sandwich Farm Elevator : The Elevator That Pays Its Way

Twenty-Four Foot Sandwich Farm Elevator

Our Elevators are Fitted with Shelled Corn Grates. See page 7

CYPRESS

Will last as long as you need it
this trip and then do your
boy good service.

See Page 30 for directions
"How to Order"



Complete with Tilting Hopper, Wagon Dump, Sandwich Four-Horse Hand Portable Gasoline Engine, and No. 24 Chain Jack.
Weight 3311 lbs. If equipped with Two-Horse Power, weight 2734.

Extra Elevator Sections

Extra or intermediate sections may be used as desired; we furnish them in 4, 6, 8, 10 and 12-foot lengths.

For moving short distances Elevators of moderate lengths can safely be carried on the trucks without uncoupling the outer sections.

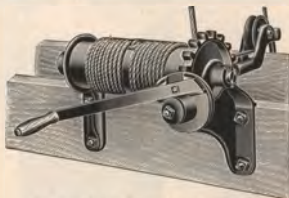
With exceptionally long Elevators the outer sections may be uncoupled and carried on the first two sections.

The Elevator is mounted on four good, strong metal wheels which are 22 inches

in diameter, with tires $3\frac{3}{16}$ inches in width. The axles and side sills are well braced, as will be seen by illustrations, for carrying machines of standard or special lengths.

Snail Screw Windlass

To raise or lower the Elevator we use a snail screw windlass, and the work of raising or lowering is most easily accomplished



Snail Screw Locks Solidly. No Danger of Elevator Dropping with Serious Breakage

with this device and much safer and easier than with the common ratchet scheme. The gear or screw locks solidly at any desired point in its travel, and there is no danger of its releasing, dropping the Elevator and causing serious breakage. To this cylinder or drum we fasten two $\frac{3}{8}$ -inch wire cables running to each side of the Elevator. This cable is much stronger and more durable than rope, for it will not shrink or stretch and will stand longer use and wear.

Receiving End, Raised or Lowered

The lower end of Elevator is pivoted on a shaft which is bolted to the underside of Elevator and at each end of this shaft is a small gear which travels in a rack or bridle casting attached to the front end of each truck sill for the purpose of keeping the lower end of Elevator solidly on the ground, no matter at what angle it may be raised. In this gear a hand lever is placed and the operator may raise or lower the receiving end of Elevator very readily.



Strong, Malleable Hinge Used Between Elevator Sections

The New "Easy Lift" Tilting Receiving Hopper



Tilting Hopper in Working Position

We manufacture two styles of Receiving Hoppers: the Tilting pattern, shown and described on this page, and the Swinging type, on page opposite.

Our New "Easy Lift" Tilting Hopper is located in line with and is driven from the main elevator. As the wagon is raised by the dump the grain discharges into the hopper or cross conveyor.

We have a simple gear and windlass device for raising and lowering this hopper, and as it has to be raised and lowered for each load, this should be carefully considered by the buyer. It can be operated easily by a boy and is superior to those that have to be raised by hand. It is so constructed that the grain may be discharged into either side, and, as to which side, this is to be determined by setting the Wagon Dump, described later, on either the right or left side of the elevator.

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It is built as low as possible, that low wagon trucks may be used, and the side boards are of good width and are interchangeable; fastened to the ends of the side boards, which drop down when the wagon is in position for dumping, are sheet iron plates which prevent the grain from overflowing and scattering at the ends.



Tilting Hopper Swung Upright to Permit Wagon to Pass to Position for Unloading

The Tilting Hopper is always shipped with our elevator outfits unless Swing pattern is specified.

Swinging or Swivel Receiving Hopper



A Cypress Shingle from the Austin House.
Clifton, Staten Island, Built in 1710

Swivel Hopper Set Ready to Receive Load

When ordered, we can furnish instead of the Tilting Hopper, a Swinging pattern, arranged with swivel gearing so as to be swung around out of the way of the wagon and back into receiving position when the wagon is in place. They are easily handled and are preferred by some because of their adaptability to wagons of different lengths. They are more expensive to build than the Tilting

type and are sold at slight advance in price. The swivel gear frame, also the gears and sprockets, are heavier and stronger than will be found on other makes; in fact, it is practically the same swivel as we use to drive our extension or drag feeders to our large power corn shellers. The illustrations on this page give a good idea of its general appearance; also see pages 25 and 28.



Swivel Hopper Swung at Right Angle and Out of Way of Wagon

Sandwich Overhead Wagon Dump

We employ only the overhead type of wagon lift or dump, using chains for connecting with the wagon wheels, thus doing away with the difficulty found with a rope connection of stretching and shrinking in varying weather conditions.

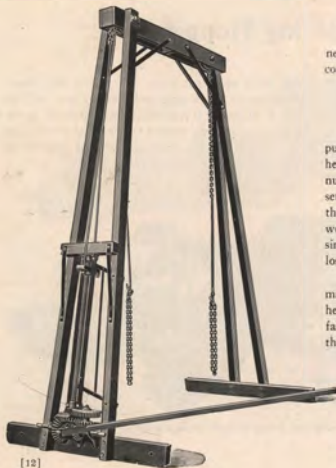
Our Dump is made sufficiently high to avoid interfering with the extra wagon sideboards used in husking. See illustrations on pages 18 and 19.

Our system of gearing is, we believe, the simplest and strongest devised for this purpose. See opposite page. We use a heavy screw, made of first-class steel, with heavy threads that will wear a lifetime. The raising slings are attached to a large cast nut running over this screw, and the nut is caused to move down and up by a simple set of gears actuated by tumbling rod from the lower Elevator shaft. Our scheme for throwing in and out of gear is automatic. The speed at which the wagon is raised is well proportioned for moderate work of one team, and by an ingenious arrangement of simple gears, wagon is lowered about $2\frac{1}{2}$ times as fast as it is raised, so there is no time lost in that operation.

A shifting and controlling lever is conveniently arranged so the operator has the machine under absolute control at all times, and the load may be raised or lowered as he wills, or caused to stand still at any point. There is no possibility of the wagon falling, and no chance for flooding or overloading the Elevator, if the operator controls the lift as he may.

The dump is made so it may be taken down and packed away in a small compass, or it may be loaded on the truck for transporting from one crib to another.

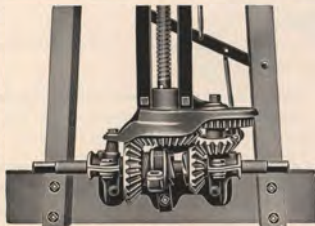
For simple, durable construction, nice adaptation to the work demanded of it, we believe our dump leads. The advantages of the overhead style as compared to the platform pattern are many; it is much simpler, lighter and easier to transport. There is no platform for the team to stumble over, and the close driving necessary with the platform is avoided.



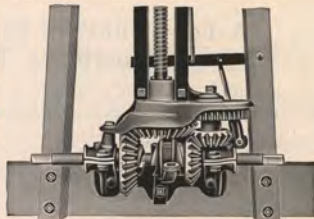
The Simplest and Strongest Jack Gearing

Ever Devised for Handling the Wagon

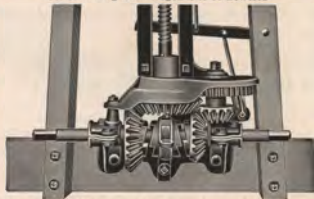
Illustrations Show Detail in
Various Positions



Position of Gearing when Ready to Raise Wagon



Set of Gearing when Wagon is to be Lowered



Gearing Out of Motion and Its Position when Wagon is at Rest

A Few Points in Favor of Our Overhead *vs.* the Underneath Type of Wagon Dump

No clumsy platform or abrupt rise for the horses to stumble over and strain themselves in pulling up the heavily loaded wagon.

No platform to wear out, break or rot.

No difficulty in getting the team to always stop at the right place. It is difficult to stop a lively, nervous team and land the front wheels of a heavily loaded wagon at just the right spot at the top of the incline of the platform jack. If they pull the wagon over the top, as they frequently do, time is lost in turning around and coming up again.

A careful driver dislikes to have a valuable pair of colts strain, slip and stumble over an icy dump platform covered with obstructions.

Our overhead type handles wagons of various lengths. The wagon can be swung fully 18 inches in either direction from the center. The platform dump requires a fixed length of box.

It can be used on a side hill by merely leveling up the sills.

Our overhead dump will handle a bob sled almost as easily as a wagon.

No danger of dropping the wagon by cramping or turning of the team.

Chains are not cut or worn by winding around small drums or cylinders.

Our overhead dump can be taken down and stored away in small space in five minutes' time.

The platform pattern occupies much valuable storage in the machine shed and is so heavy and disagreeable to move that most farmers leave them out of doors, where they quickly rot out.

Our overhead dump is easily skidded from one crib to another or for long moves can be taken down and loaded on a wagon in a few minutes by one man.

Our overhead dump is best adapted to work in driveways.

The Sandwich Swivel Spout

For Farm or Grain Elevators

We show on this page an illustration of our Swivel Grain Spout, which easily attaches to the upper end of farm or grain elevators for delivering ear corn, shelled corn, oats, wheat, etc., and other small grains to different sections of a crib or bin.

The construction of the spout is most simple; it is made up of a set of swivel castings, which fasten to the main elevator head, and to these is attached the heavy steel spout, which is well protected by paint; it has but few parts, hence free from complications, and always found in working order.

The first section is nearly closed at upper end, thus avoiding the spilling out of small grain.

The spout can be raised or lowered to suit varying conditions and it may be swung to any point in a circle; in its construction we use no elbow, and it will fill a crib to within a short distance of the same height as the elevator head.

The Swivel castings are 15 inches in diameter and there are no places for the grain to lodge and clog the elevator.

We regularly ship the swivel head with a 4-foot spout, but additional 4-foot lengths may be furnished when desired.

When extra lengths are furnished the second section telescopes on the first section and is held in place by chains.

Additional sections telescope on the first section, as for instance, a 16-foot spout reduces when telescoped to 5 feet 2 inches.

This type of spout is furnished with our overhead conveyor, described and illustrated on page 17.

We are also in position to furnish round, flexible telescope spouts 14 inches in diameter for ear corn and small grain, and 8 inches in diameter for small grain only.

Illustrations on pages 21, 22, 23, 24, 26 and 27 show the Swivel Spout attached to elevators at different crib locations.

The Swivel Spout is not included with the elevator, and an additional charge is made for it.



Overhead Crib or Roof Conveyor



We are prepared to furnish Overhead Conveyors in all lengths. These are well made of cypress, as in body parts of elevator, and have ample capacity. The standard sections are seven feet long, with one trap door in each section. The conveyor is usually located under the ridge of the crib, and small grain is allowed to drop through the openings into bins underneath, above the driveway, and a 12-foot chute or spout is provided to carry the ear corn to cribs on either side. See illustrations on pages 20 and 25.

A convenient method of driving the Overhead Conveyor is to run the main elevator up at one end of the crib and drive the conveyor directly from it by sprocket and chain. A cut of such an outfit is shown on page 20. If the main elevator is placed inside the crib the grain may be carried to the conveyor by a chute from discharge end of elevator, and by means of a simple arrangement of gearing the conveyor is made to run back in the opposite direction (see page 25), or it may be driven at right angles to the elevator, as desired.

If your crib is short and high, it may be possible to well fill it without using a conveyor, simply running the main elevator up under the roof to a cupola, and by using a long swiveled spout, such as is shown on opposite page, the grain may be carried to either end of the crib or bin.



When it is not possible to run the upper section of elevator close under the roof of the crib, it may be run over the roof into the cupola. See cuts on pages 22 and 26.

Here is a glimpse down a country highway near Monroe, La. That fence has no posts. It was built by forcing split Cypress boards between saplings. This occurred so many years ago that nobody knows when it was, nor who was the labor-saving genius who did it. Then the trees grew, and grew, and grew.

Overhead Crib Conveyor with Swivel Steel Discharge Spout



Whether decently treated or abused
Cypress will outlast three times any
other kind of lumber or sheet
metal used in this line of
manufacture.

The Overhead Crib Conveyor illustrated above is the same as shown on page 16, except it is fitted with our 12-foot Swivel Steel Discharge Spout, and which is furnished at a slight cost in advance of the regular 12-foot straight conveyor spout; this spout may be swung at any angle from the conveyor, distributing the grain at different points along the bin or crib. With a spout which can only be set at right angles to the conveyor, the husks, silks and shelled corn are all deposited at one spot, and should the corn be damp, as is very often the case, it is likely to become musty and rot. As mentioned on page 16, the standard conveyor sections are 7 feet in length, and the Swivel Steel Discharge Spout, shown above, may be attached to the opening in each section; when hung to the



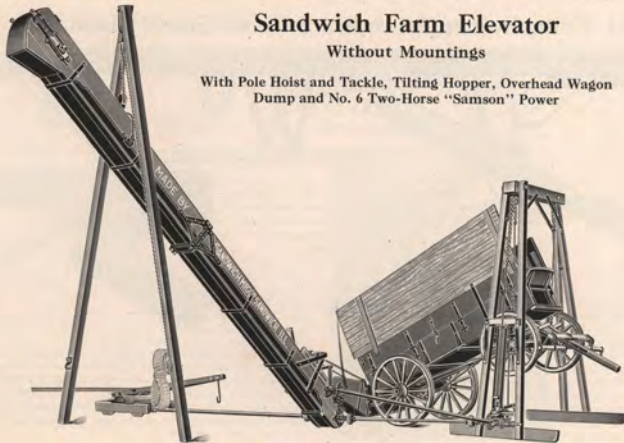
last or outer end section the spout may be swung at any side angle from conveyor and also at any angle from end of conveyor, as shown by smaller cut on this page. The regular length of spout is 12 feet, but additional four-foot lengths may be added when wanted. The Swivel Steel Discharge Spout may be attached to conveyors of previous seasons' make, but they cannot be used in connection with conveyors made by other manufacturers.

The Sandwich Farm Elevator : The Elevator That Pays Its Way

Sandwich Farm Elevator

Without Mountings

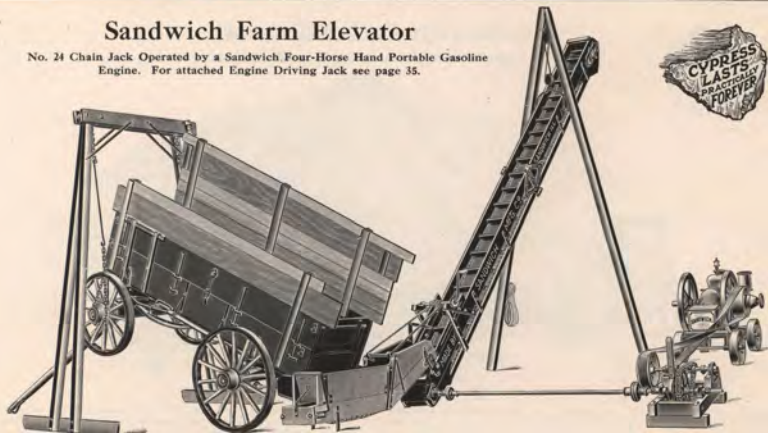
**With Pole Hoist and Tackle, Tilting Hopper, Overhead Wagon
Dump and No. 6 Two-Horse "Samson" Power**



Sandwich Manufacturing Company : Sandwich, Illinois, U. S. A.

Sandwich Farm Elevator

No. 24 Chain Jack Operated by a Sandwich Four-Horse Hand Portable Gasoline Engine. For attached Engine Driving Jack see page 35.



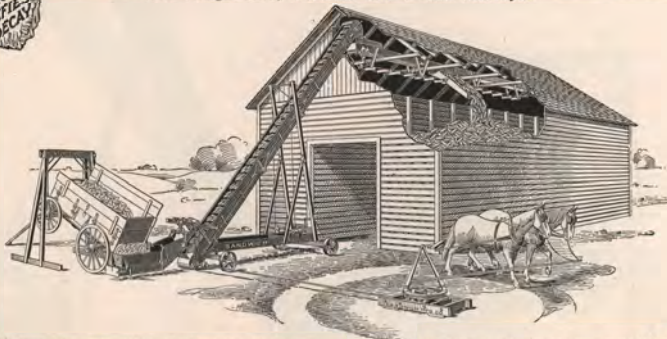
The illustration shown above is of the dismantled Elevator, but the mounted outfit may be driven in the same manner. We can furnish Speed Jacks (see pages 34 and 35) to meet any speed or size of Gasoline Engine, and at home factory and branch houses we carry in stock at all times Gasoline Engines from $1\frac{1}{2}$ to 10 horse power, mounted or stationary.

The Sandwich Farm Elevator : The Elevator That Pays Its Way



Sandwich Farm Elevator

With Straight Away Overhead Crib or Roof Conveyor



If desired, the Elevator may be set at either end, and also on either side of the crib and at right angles to the conveyor; where a right angle set is made our right angle gear drive is necessary and is furnished at small cost.

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For full information relative to roof conveyors, see pages 16 and 17. Our regular 12-foot straight away discharge spout is shown attached to above conveyor, but when wanted the Swivel Steel Discharge Spout, illustrated and described on page 17, may be furnished.

Sandwich Farm Elevator

With Swivel Spout Placed at End of Crib



Many times it is only possible for the user to set the Elevator outfit at the end of crib, and if so, the plan as shown is a most satisfactory one. If the crib is so constructed that the elevator may be run well to the peak of roof in center of crib, then by use of our Swivel Spout, described on page 15, the grain may be delivered to any point

in the crib. If it is not possible to run the Elevator to the top center of crib, setting as shown above may be made, and, when one end of the crib is filled, the outfit may be moved to opposite end. With the mounted rig this is only a short job.

Sandwich Farm Elevator with Swivel Spout Placed at Side of Crib



This many consider an ideal manner of filling a crib of ordinary length and this method is possible in most cases of modern crib construction. It does away with the use of any overhead Crib Conveyor, making a less expensive outfit, and also one lighter in draft. It is very simple, and by the use of our Telescope Swivel Spout any and all sections of the crib may be filled to the roof, for the grain is delivered to the highest point. With the set as outlined above you have the use of all your space, the driveway is not filled up with the elevator and its different parts, and there is plenty of room to store wagons and other farm tools. If there is no cupola on the crib an opening may be made in the peak at center and a wooden hopper fitted into this opening and to its lower end the Swivel Spout castings may be at-

tached, and to this the necessary lengths of spout. (See page 38.) Care should be exercised in measuring for an elevator set as above. The best method is to run a cord from peak of roof, at an angle not greater than 45 degrees, to point on ground where the elevator will rest and then give us the measurement in feet.

Some may prefer not to run the elevator over the roof as above, but prefer to cut an opening in the center of the crib just below eaves and run the elevator on the underside of roof to peak, which may be easily done. The time required to place the outfit in the position shown above is not long, for our elevator is quickly and easily put together, and it is also readily taken down and stored away for next season's use.

Sandwich Manufacturing Company : Sandwich, Illinois, U. S. A.

Sandwich Farm Elevator with Swivel Spouts

With Sandwich Four-Horse Hand Portable Gasoline
Engine and No. 24 Chain Jack



When you buy Cypress you buy
not only for yourself but
for those who are to
follow you.

Sandwich Farm Elevator with Swivel Spouts and Two 18-foot Roof Sections



In the construction of a crib to be used with such an Elevator Outfit as we have illustrated on this page, we would recommend a building 48 ft. long, 28 ft. wide, 16 ft. posts. Driveway to be 12 ft. wide by 9 ft. high. Granary over driveway; 2 x 10 joists should be used over the driveway with the ends spreading about 3 ft. to give more strength and make the building more rigid. If a 32-ft. crib is desired, use one 18-ft. Roof Section and 16-ft. Swivel Spout.

Space of $3\frac{1}{2}$ ft. from plate on top of frame to rafters, without any studding to support roof except one every 12 ft. This gives free space for the swinging of the steel spout without being obstructed or cramped where end of steel spout enters crib.

The roof sections of Elevator which are permanent should be placed to one side of the dormer window to permit getting in on opposite side to do any adjusting that might be necessary.

A crib built in this manner can be equipped with two 18-ft. roof sections and two 12-ft. swivel spouts, and a 30-ft. Portable Elevator will fill the entire building, only leaving the Elevator proper exposed to the weather, and will be found a very practical rig in every sense of the word.

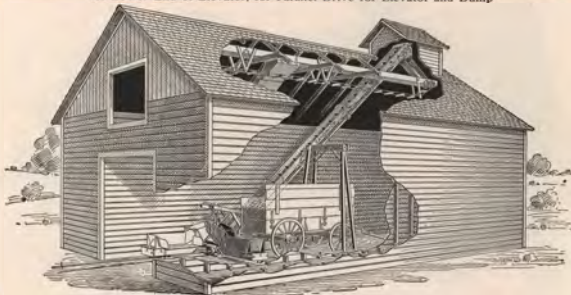
The power can be set permanently at one end of the crib. The Wagon Dump or hoist in the center of the crib (outside) and when one end of the crib is filled, move the Elevator to the dormer window at the opposite end, put in an extra tumbling rod where elevator was taken out and drive load in from opposite end, making an easy re-set with very little trouble.

Cribs built on this plan in place of the half pitch are very popular in some sections of the country, and give more space under roof and require smaller dormer windows. If it is preferred to build the roof with half pitch, the same results may be accomplished.

Sandwich Manufacturing Company : Sandwich, Illinois, U. S. A.

Sandwich Farm Elevator

For Use in Double Crib Driveways with Swinging Hopper, Overhead Jack, Roof Conveyor and Bevel Jack, for Lower End of Elevator, for Parallel Drive for Elevator and Dump



The Swivel or Receiving Hopper swings into line with the main elevator, out of way of wagon when it is being driven into the crib driveway. (See page 28.) When desired, the overhead section or cross pieces of the Wagon Dump with rollers and chains may be placed between the overhead floor joists and only the upright side of Wagon Dump carrying the raising and lowering screw and gears used.

To use an inside outfit, such as illustrated above, requires that you have a driveway at least 10 to 12 feet in height and about the same in width. It also necessitates a special mechanism (a reverse

gear) at upper end of elevator to drive overhead Conveyor, for which we make an extra charge. It is also necessary that your crib have a cupola at one end, as shown above. If preferred, the power may be set at right angles to the elevator, the tumbling rod running under one side of the crib. Where roof conveyor is installed, as above, we can fit it with Swivel Steel Discharge Spout mentioned on page 17, if wanted, and at slight additional expense.

See page 28 for more information relative to this outfit.

Sandwich Farm Elevator with Roof Extension



Farmers having extra long cribs, or having flat roofs, will find the above outfit to be convenient and one which works perfectly. This section can be placed under the roof with connection at the eaves, as shown in cut on page 24. If preferred, a dormer window may be built on the crib instead of cupola, and the connection with roof section made in such window. Our Sandwich Swivel Spout, as shown on page 15, can be attached to upper or discharge end of roof section and small grain or ear corn may be spouted to overhead bins or to cribs at either side of driveway. The roof section may be arranged to discharge into a cupola, as illustrated above, or if no cupola is on

the crib, an opening may be cut in peak, or at other point on roof. We can furnish, where needed, at slight additional cost, a wooden hopper for use between elevator and spout in crib roof where there is no cupola. The roof sections may be furnished in any desired length. The roof extension is driven by a chain running from the upper end of the main elevator. The extension may be placed to run along top of roof, as shown, or an opening may be made in crib below eaves and the extension run along underside of roof and permanently left in that position.

Sandwich Farm Elevator

With Swivel Spout Loading Box Car



The outfit as shown above will be found practical for the track buyer, and most convenient for those farmers living near the smaller towns where there are no grain warehouses, but where there is a railroad siding, and even where there are warehouses many farmers prefer to ship their grain direct.

The cut shows the horse-power combination. Many buyers pre-

fer the elevator equipped with swivel receiving hopper and No. 441 engine jack (see page 35), permitting setting elevator either parallel or at right angle to the car, and with the hand-portable Sandwich Engine to drive, the entire rig may be moved from one car to another with a minimum of effort. For small grain only the wagon dump may be dispensed with, if desired.

Swivel or Swinging Hopper

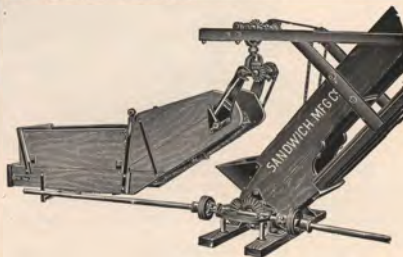
and Bevel Jack for Lower End Elevator for
Parallel Drive for Elevator and Dump

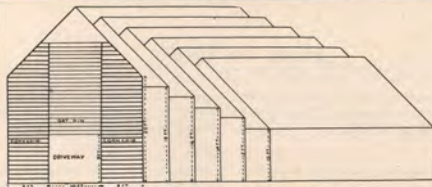


The illustrations on this page show the position of the Swinging or Swivel Hopper where used in a crib driveway, as described on page 25. These cuts also show quite plainly, especially the one in the lower right-hand corner, our Right Angle Bevel Gearing Jack, which is used when one wishes a parallel drive for Elevator and Dump Jack, as is necessary where the rig shown on page 25 is wanted.

The upper left-hand illustration shows the Hopper at right angles to the Elevator and across the crib driveway. If for any reason it should be desired to place the Bevel Jack on the opposite

side of Elevator, it may be done. Also, the Hopper can be swung to the other side. The cut below shows the Swivel Hopper swung to position in line with the Elevator, and is the position it would occupy while the wagon was being driven into the crib. When the wagon is ready to be dumped, then the Hopper is swung to the position shown to the left.





If You are Planning a New Crib

and granary, a study of the cut and table on this page will be interesting and profitable, showing the advantage of building a modern high crib, with elevator, instead of old style long and low structure.

In Building a Large Crib

with granary over driveway, it is usually found that the saving in cost of foundation, floor and roof with a high building equipped with a **SANDWICH ELEVATOR**, as against building an ordinary low and long crib, is sufficient to cover the cost of the elevator outfit. The saving in ground area is also worth considering.

It will be noticed that a crib 32 feet long with 20 feet outside studding has more storage capacity than a crib 60 feet long with 10 feet outside studding.

The annexed table gives the approximate capacities of cribs and granaries of various heights. These figures are based on 8-foot cribs with 10-foot driveways. A wider driveway is, however, preferable when an inside elevator outfit is to be installed.

HEIGHTS OF OUTSIDE STUDDING		LENGTHS OF CRIBS					
		32 ft.	36 ft.	42 ft.	48 ft.	55 ft.	60 ft.
		Bushel	Bushel	Bushel	Bushel	Bushel	Bushel
20	Oats.....	4,480	5,040	5,880	6,720	7,560	8,400
ft.	Corn.....	4,761	5,336	6,249	7,142	8,035	8,928
	Total Storage	9,241	10,396	12,129	13,862	15,595	17,328
18	Oats.....	3,968	4,464	5,208	5,952	6,696	7,440
ft.	Corn.....	4,332	4,896	5,712	6,528	7,344	8,160
	Total Storage	8,300	9,360	10,920	12,480	14,040	15,600
16	Oats.....	3,456	3,888	4,536	5,184	5,832	6,480
ft.	Corn.....	3,942	4,335	5,174	5,913	6,652	7,392
	Total Storage	7,398	8,223	9,710	11,097	12,484	13,872
14	Oats.....	2,944	3,312	3,864	4,416	4,968	5,520
ft.	Corn.....	3,332	3,874	4,636	5,289	5,961	6,624
	Total Storage	6,276	7,186	8,500	9,715	10,929	12,144
12	Oats.....	2,432	2,736	3,192	3,648	4,104	4,560
ft.	Corn.....	2,723	3,043	3,599	4,055	4,511	4,968
	Total Storage	5,155	5,779	6,791	7,703	8,615	9,528
10	Oats.....	1,920	2,160	2,520	2,880	3,240	3,600
ft.	Corn.....	2,173	2,452	2,961	3,470	3,979	4,488
	Total Storage	4,093	4,612	5,481	6,350	7,219	8,088

How to Order

The Sandwich Standard Farm Elevator Outfit Consists of 24-Foot Main Elevator, Tilting Cross Conveyor with Windlass, Four-Wheel Mounted Truck and Derrick, Overhead Wagon Dump, No. 6 "Samson" Power, Rods and Knuckles

The first thing to be considered when ordering is the length of Elevator needed for the work to be done. It should not run at a steeper angle than forty-five degrees. A little less pitch will elevate faster. The usual practice is to have the Elevator one and one-half times the height to which the grain is to be delivered, but in making this measurement be sure to start from the ground level at the foot of the Elevator and not from the top of a driveway or incline, and if a spout is to be used at the discharge end, its length and pitch must be taken into consideration. To be safe, it is well to order two or three feet more than may seem necessary; the additional cost is small and the results are apt to be much more satisfactory.

Crib Conveyors may be measured six to eight feet shorter than the crib. Our conveyors are made in seven-foot sections, with one trap door in each. The outer end section has the discharge at the extreme end.

A 12-foot spout is furnished to carry ear corn from conveyor

to cribs on either side. Where the swivel Steel Discharge Spout, as shown on page 17, is wanted, it is regularly furnished in 12-foot lengths.

The Wagon Dump may be set on either side of the Elevator. Horse Power tumbling rod may be coupled direct to Elevator shaft or to the wagon dump shaft, so as to bring the dump between the power and elevator, when that arrangement is necessary.

It should be remembered, however, that when necessary to set the power on the right-hand side of Elevator the motion of the tumbling rod must be reversed, which, with the No. 6 "Samson" Power, may be done by putting the team on the other side of the sweep.

Our powers are now regularly speeded 29 to one round of the team; if a power of another make and speed is used, we can furnish a simple intermediate jack to reconcile the motion. (See No. 26 Special Jack on page 34.) In a similar manner the speed of Gasoline Engines may be brought down to the right motion for Elevator.

Horse Powers for Use with Farm Elevators

We manufacture the most complete line of sweep horse powers offered by any concern in the United States. Our list embraces all sizes from one to ten-horse and covers powers of speeds varying from seven to seventy-five revolutions of tumbling rod to each round of horses. It will be seen that our ranges of size and speed are so great that a purchaser can select from our list a power for almost any work at which sweep powers are ever employed.

Our specialty in horse powers is the widely known and popular Samson line, which patterns we build in two, four, six, eight and ten-horse sizes.

These machines are heavy, very compact, simple and light running.

We do not believe in light weight horse powers, and all our sizes are heavy enough to insure all the strength requisite for the heaviest work that they should ever meet within the range of their capacities, as rated by us.

The materials used in the construction of our horse powers are the best obtainable. The framings are of first quality oak timber, well seasoned, carefully fitted, and bolted to perfect solidity. The

shafts have turned bearings, and such boxes as carry fast running shafts, or are subject to heavy strains, are filled with the best anti-friction babbitt metal. All castings used are carefully selected and we rarely have claims for parts to replace imperfect ones.

You Are Safe in Buying

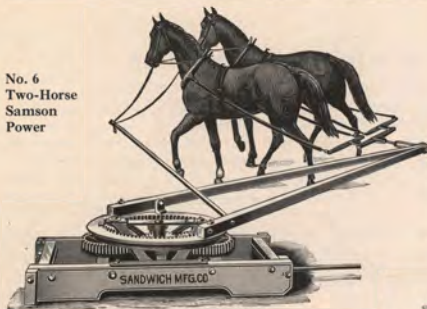
A Sandwich Horse Power for any work to which it may be adapted in points of speed and capacity. Careful, painstaking labor is the rule in the construction of our horse powers.

In Ordering Horse Powers

Always state what kind of a machine you wish to run, and give the manufacturer's estimate of the amount of power required to run it; and also give the number of revolutions that the driving shaft should make per minute, and state whether you will use a jack and belt, or desire to make a direct tumbling rod connection. If we furnish a jack, it is necessary that we know the diameter of the driven pulley on your machine, as well as the speed at which it should be run.

The Sandwich Farm Elevator : The Elevator That Pays Its Way

**No. 6
Two-Horse
Samson
Power**



This Power is especially popular with farmers using crib elevator outfits and thousands have been sold for this purpose within the last few years. It turns tumbling rod in the same direction the team travels and is furnished to give any one of the following speeds: 25, 27, 29, 32, 37 and 41 revolutions.

When shipped with our grain elevator outfit it is now furnished with 29 speed gears, which gives tumbling rod from 75 to 90 revolutions per minute.

Its construction is such that, by changing the draft clevis over to the back of the sweep, the horses may be driven around from left to right, which, of course reverses the motion of tumbling rod. This feature broadens the range of the Power, by making it practical to run a farm elevator, feed mill, or sheller, whether such machine is geared for a Power turning the tumbling rod with or against the motion of the horses.

**No. 6 Two-Horse Power with
Sulky Mount**



To special order we can furnish our No. 6 Two-Horse "Samson" Power with sulky mount, as shown above, to be hitched behind mounted elevator, farm wagon or other vehicle when on the road. This mount is just what is needed in those localities where threshermen carry with their threshing rig portable elevator outfits. This truck device will also be found most convenient for farmers who have several cribs at different locations on the farm and who are called upon to move their elevator outfits at various times during the season. The horse power is the most unwieldy and clumsy part of an elevator rig to handle and usually has to be placed in a wagon when moved from one location to another. When the power is ready to be set, the two wheels may be removed or sunk into the ground, whichever user considers most convenient.

The wheels are metal, the same as used under the regular elevator truck mounting, are 22 inches in diameter with $3\frac{1}{2}$ -inch tires and $1\frac{1}{4}$ -inch axle.

No. 19 Four-Horse Double Geared Power



The No. 19 Four-Horse Double-Geared Power is strong, heavy and durable, and has been on the market for many years, giving universal satisfaction, and having a great range of speed, is well adapted for driving farm elevator outfits where four-horse work is required.

When ordered for use with farm elevators, we usually gear both shafts at same speed, that power may be set on either side of elevator. Where this power is used in connection with elevators of our manufacture we give both shafts a 29 speed; we have several other speeds called for by the farm elevator trade, viz.: 25, 27, 32, 37 and 41 revolu-

tions. If wanted, we can build this power with one shaft giving 41 revolutions of tumbling rod to one round of horses, and one giving 60 revolutions. We also have a combination giving the fast shaft 48 and 75 revolutions to each round of horses.

The slow shaft of this power turns with the movement of the horses and the fast shaft turns in direction opposite or against the horses.

The No. 19 Power is furnished with our elevator outfit only on special order and at an additional price.

Speed Jacks

Gasoline engines are being used extensively for farm power, and if one is on the farm the expense of the outfit may be reduced by doing away with the horse power and running by belt connection. We can furnish any style of Speed Jack wanted, but we should have information as to size of engine, size of engine hand wheel and number of revolutions it makes per minute. We can fit any of our Jacks with extended shaft and with tight and loose pulleys at slight additional cost.



No. 20 Spur Jack

Strong, compact and durable; for use with our one, two and four-horse powers; transmits the motion at right angle with the tumbling rod, and gives the hand wheel $2\frac{1}{2}$ revolutions to one of any tumbling rod with which it may be connected. Band wheels larger than 18 inches in diameter cannot be used on this Jack.



No. 22 Bevel Geared Jack

Adapted to any power up to ten-horse; transmits motion in a line with the tumbling rod. It gives the band wheel nearly four revolutions (3 12-14) to one of any tumbling rod with which it may be connected.



No. 21 Spur Jack

Construction similar to No. 20, but strong enough for use with any power up to eight-horse; transmits the motion at right angle and gives the band wheel four revolutions to one of the tumbling rod. We sell a great many of these jacks for use with gasoline engines.



No. 23 Bevel Geared Jack

Adapted to the same powers as Spur Jack No. 20, but transmits motion in line with the tumbling rod. It gives the band wheel 2 10-12 revolutions to one of the tumbling rod. Band wheels larger than 18 inches in diameter cannot be used on this Jack.

It may be the prospective buyer has a two-horse power, or larger, which is in good condition, and does not care to go to the expense of buying another, but it may be speeded too fast or too slow to run a farm elevator. If so, by the use of one of the speed Jacks, shown and described below, the correct speed and connection to elevator may be made. In order that we may know the Jack to recommend and the proper size pulley to drive it, we should know the size of your horse-power, how many revolutions it makes to each round of team and whether the tumbling rod turns with or against the horses.



No. 24 Special Intermediate Jack

This Jack has three gears and is used to increase or decrease the speed by connecting the same at any point in the coupling of the tumbling rod. The object of the third gear is to get a reverse motion from the second gear and enable the user to get his Horse Power on either side of the Elevator. It can be used on any speed of tumbling rod. Give us the speed and the size of the Horse Power and we can fit the Jack with the right gears to give the Elevator the proper speed. The shafts to this Jack are all squared 1 inch and will take knuckles of the same size.

(See succeeding pages for additional Speed Jacks)

N. B.—In ordering Jacks, always state the size of band wheel wanted. In absence of specific instruction on this point we always ship as follows: With Jacks Nos. 20 and 23, band wheel $15\frac{1}{2}$ inches in diameter; Nos. 21 and 22, band wheel 18 inches in diameter.

Speed Jacks

CONTINUED



No. 24 Chain Jack

As the cut shows, this is a chain jack with clutch, and gives Elevator drive shaft one revolution to each $3\frac{1}{2}$ revolutions of drive pulley, and transmits the motion at right angles to the tumbling rod. By the use of the clutch it may easily be thrown in and out of gear, and but one pulley is necessary. Connection may be made on either side. Our regular No. 23 $\frac{1}{2}$ knuckle, squared 1 inch, is necessary for use in connecting to this jack, for which an extra charge of \$1.25 list is made. Always give speed and diameter of engine pulley, but where this information is not given will fit the jack with $12\frac{1}{2}$ x 4-inch band wheel.

We can furnish different sized drive pulleys to give desired speed.



No. 442 Engine Driving Jack Attached to Wagon Dump

This jack is equipped with tight and loose pulley, and can be furnished for either right or left hand drive.

The Drive pulley makes about three revolutions to one of tumbling rod shaft.

Different sizes of drive pulleys can be furnished to get desired speed.



No. 441 Gasoline Engine Driving Attachment or Jack

There has been an increasing demand for a jack of this character, which has caused us to place this one on the market.

It is equipped with 15x4 inch tight and loose pulleys, and is operated in direct connection with the elevator.

The lower elevator shaft makes one revolution to every $2\frac{1}{2}$ revolutions of band wheel shaft.

Different sized sprockets can be furnished to reconcile engine drive pulleys of various sizes.

In ordering the attachment give size of pulley and speed of the engine, also the horse power rating of engine.

A Letter From the Crack Elevator Dealer of South Dakota



*Vermilion, S. D.,
Jan. 28, 1918.*

*Sandwich Manufacturing Co.,
Sandwich, Illinois.*

Gentlemen:

Mr. Bruyer is a wealthy farmer here, owns lots of land and has six boys. Seven years ago we sold him a Sandwich elevator which he has used during this time to elevate the corn and small grain from some twelve hundred acres of land, moving the elevator from farm to farm. Last year he divided up this land among the boys and each one went for himself and we sold them a half car of Sandwich elevators. We consider this a pretty good testimonial for your machine.

Yours truly,

E. C. Barton.

Mr. Barton Sold Five Cars of Sandwich Elevators in 1917



A 48-Foot Elevator Outfit (with Swivel Hopper), Delivering into Cupola



An Everlasting Sandwich Cypress Farm Elevator Used as a Silo Filler



Two Sandwich Farm Elevators Installed at the Ruins of The Iowa Elevator Co., Peoria, Illinois, which was Recently Destroyed by Fire

This illustration shows one of the many uses to which Sandwich Elevators may be put.

Note special swinging Extension Feeders attached to the Elevator in

the foreground. We are prepared to furnish such attachments in varying lengths.

Sandwich Gasoline and Kerosene Engines



Sandwich Four-Horse Power Hand Portable Kerosene Engine

Sandwich Engines are all of the horizontal type. The beds are unusually heavy and amply strong for the strains put upon them. The crank shaft boxes are cast at an angle of 30 degrees, thus distributing the thrust equally throughout the bed instead of directly against the bolts which secure the box caps. All beds are surfaced and bored in jigs, insuring accuracy.

The four-cycle principle is employed in all Sandwich Engines. Experience has shown, and the best engineers everywhere agree, that of the two-cycle and four-cycle types the latter is the more economical, practical and durable and especially desirable for agricultural conditions.

The Gasoline Engine illustrated on this page gives a very good idea of the general outline of the "Sandwich" Gasoline Engines.

Sandwich Gasoline Engines are uniform in design, and are of one quality, the very best that brains, machinery, material and labor can produce.

If interested in Gasoline Engines, send for special Engine Catalog.

**All Sandwich Elevator Outfits are sold under the following
warranty which is not subject to change by
salesman or dealer:**

SANDWICH Elevator Outfits are warranted to be well made of good material and durable with proper care, and if properly connected and managed capable of doing good work. Purchaser to have the right to a reasonable trial use of the machinery, to be made within one week after taking it into his possession, and if thereupon it should fail to do good work, written notice shall be given by the purchaser to the dealer from whom it was received and to the Sandwich Manufacturing Company, Sandwich, Illinois, and reasonable time allowed for the said Company to send an expert to remedy the alleged difficulty, the purchaser to render prompt and friendly assistance and to provide the necessary power and material for operating the machinery, when, if it cannot be made to do good work, it may be returned at the expense of the purchaser, to the dealer from whom it was received and new machinery given in its place, or, at the option of the Sandwich Manufacturing Company, the notes and money paid for said machinery may be refunded, either of which, when done, shall be full and final settlement of the transaction. Continued possession of said machinery after one week from taking it into possession of the purchaser, or failure to give notice as above, shall be evidence that the warranty is fulfilled.

SANDWICH MANUFACTURING COMPANY.

WE MANUFACTURE

Sandwich Farm Elevators, Samson Horse Powers,
Sandwich Spring and Cylinder Shellers, Sandwich
Horse, Belt and Motor Power Hay Presses, Sand-
wich Gasoline and Kerosene Engines, Sandwich
Side Delivery Hay Rakes, Clean Sweep and
Easgway Hay Loaders, Sandwich and Reliance
Feed Mills, Manure Spreaders.