

ASPINWALL POTATO MACHINERY

ASPINWALL MANUFACTURING COMPANY
JACKSON, MICH. U.S.A.

1884

1908



Aspinwall Manufacturing Company

Aspinwall Potato Cutters
Aspinwall Potato Planters
Aspinwall Potato Sprayers
Aspinwall Potato Diggers
Aspinwall Potato Sorters



E. J. Wiesner, Agt.
Stine's Corner, Pa.

Jackson, Michigan, U. S. A.

¶ *We take this opportunity to
thank our patrons, who,
during a quarter of a cen-
tury, have sent us thousands
of commendations favoring
the Aspinwall goods.*

Notice to Buyers

Be very particular to give full and **complete shipping directions**. Unless shipping instructions accompany orders, we shall use our best judgment in the selection of routes.

If attachments are wanted **the order must so stipulate**.

Orders are filled with all possible dispatch, but under no circumstances will we guarantee the time of delivery. When date of delivery is mentioned we will endeavor to ship the goods as near the time as possible, but cannot assume the responsibility for any loss or inconvenience caused by overdue delivery or our inability to produce the work undertaken, nor can orders be cancelled without our consent.

Delivery—We deliver to railroad or express company in this city in good order and condition, and are not responsible for any delays or damages caused in transportation. If you give the Railroad Co. a clean receipt for damaged goods, you do so **at your own risk**. We are **not responsible** for goods broken in transit. Broken goods should be **refused** or a full description of breakage made by agent on expense bill. If this is insisted upon, full damage can **always** be collected from the railroad company. If goods are broken, notify shipper immediately on receipt of the shipment. Boxing or crating will be charged for extra at cost, unless arranged otherwise.

We get bill of lading with through freight rate inserted, to all points where through rates can be obtained. **These rates we do not guarantee**, but will endeavor, if there is an overcharge, to get the amount refunded, but will in **no instance** allow it to be charged to us until we receive the overcharge from the railroad companies, when it will be refunded or placed to your credit. We will cheerfully render all assistance in our power to trace and recover lost goods and collect damages, but under no circumstances will the payment of our bills be subject to the arrival or non-arrival of goods at their place of destination.

Unless your standing is known to us, or you have a rating with the agencies, please have satisfactory references accompany your order; unless this is done, there will necessarily be sufficient delay to look up your credit.

We do not pay charges on messages sent to us by telegraph ordering goods or regarding other matters.

Repair orders, other than from authorized agents, will be shipped by express C. O. D., unless accompanied by cash.

No repairs for broken or defective parts furnished out of season, unless a request with order specifying the parts required be sent at time of breakage.

In ordering repairs, state year in which the machine was purchased. (The first new style Potato Planters were built in 1899.)

The shipping weight of our Potato Cutter is about 53 lbs.; Plain Potato Planter, 540 lbs.; with Fertilizer Attachment, 690 lbs.; No. 3 Potato Planter, Plain, 540 lbs.; No. 3 Potato Planter with Fertilizer Attachment, 693 lbs.; with Fertilizer and Corn Planter Attachments, 700 lbs.; Four-row Sprayer, 575 lbs.; Potato Digger, 1,325 lbs.; Sorter, 250 lbs.

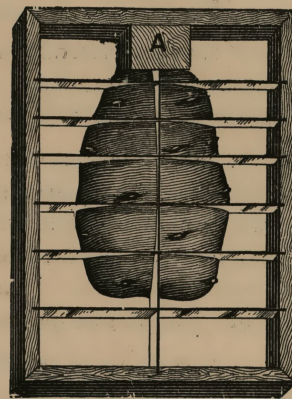
Plain Potato Planters and Planters with Fertilizer Attachment, when boxed for export, occupy (including pole) a space of about 32 cubic feet; Potato Cutters about 4 cubic feet, and when shipped with Potato Planters no extra space is taken; Four-row Sprayer, 65 cubic feet; Digger, 85 cubic feet; Sorter, 29 cubic feet.

Aspinwall Potato Cutter

"To lay some store of knowledge by
Requires a portion of our time; so
Easier methods are employed,
In lieu of grinding all the while."—L. A. A.

HAVE you one of these great labor savers? If not, try one the coming season. Cutting potatoes by hand is slow and tedious; but with an Aspinwall Cutter one person can prepare seed fast enough to keep the Potato Planter working. With a capacity of six to eight bushels of cut seed per hour, its cost may be saved in a few days. The division of eyes is better than average hand work, and much more rapid. The potatoes can be halved, quartered, or cut to any size, and the seed end removed if desired. At first thought it is seemingly impossible, but the eyes of all potatoes are spirally arranged, and at a distance apart increasing in geometrical progression from the seed end toward the stem. The Aspinwall Cutter is constructed on this very principle, and consists of a bed of knives arranged in like progression, by which it is adapted to correctly divide the eyes.

A number of cheap imitations have been put on the market, which have fallen into disuse. The constantly increasing sale of the Aspinwall is evidence of its great superiority. Like our Planter, it is constructed on correct mechanical principles and never fails to give satisfaction.



BED OF KNIVES

**Why are we the largest makers of Potato Machinery in the world?
Because we produce the best and most durable machines for the purpose.**

Aspinwall Potato Planter

RETROSPECTIVE

SUCCESSFUL in the hands of thousands of practical potato growers in all parts of the world, the Aspinwall Potato Planter stands almost unrivalled.

It was the **first successful Potato Planter invented**, and although great improvements have been made the essential features remain as evidence that the mechanical principles were correct.

Simplicity, durability and efficiency are distinguishing features of the **Aspinwall Potato Planter**.

Since its introduction a dozen or more so-called "potato planters" have been placed on the market, for which great claims were made. One by one they have fallen into disuse, resulting in larger sales for our machines. The superiority of the Aspinwall Planter is apparent when placed beside these cheap and inferior machines.

A few planters have been sold which require two persons when operating them. Manufacturers of this class of planters lay great stress on the alleged damage by puncturing the seed. The Aspinwall Planter having been used for years by thousands of our most progressive farmers, potato specialists and seed potato growers is evidence to the contrary and shows the absurdity of such claims. A similar objection might be raised against the universal practice of cutting the seed. Upon our experimental grounds, by the side of regular work, we planted seed which had been run through the planter upwards of fifty times, with equally good results.

Imitations of the Aspinwall Potato Planter thus far have been short lived. No imitation can possibly equal the original, which is being constantly improved by the inventor. **Aspinwall machines are established on a permanent basis, which insures to the purchaser the possibility of obtaining repairs throughout the life of the machine.**

If the representatives of other machines state that puncturing the seed is injurious, ask them about the effect of cutting.

Aspinwall Potato Planter No. 3

"In the realm of invention success is only obtained,
When each part and each movement bends to the end that is gained."—L. A. A.

WONDERFUL improvement in machines for planting potatoes far exceeding Mr. Aspinwall's highest expectation during the early days of the invention.

Some things appeal to men generally. In the machine world, such are intensely practical, and include the Aspinwall Potato Planter No. 3. This machine is the logical deduction of years of study and experimentation. After the introduction and testing of a number of these machines during the season of 1906, it was our intention to place but two or three hundred on the market for 1907. However, in the territory of early sales the demand constantly increased until some fifteen hundred of them were sold last season in addition to our standard, or No. 2 Planter. In construction we have adapted it to a much greater range of seed, both as to shape and size, and reduced the misses to less than one per cent.

Letters of recommendation from all parts of the country have proclaimed it a machine of the highest type. For the 1908 trade, we have added further improvements which will assure to the potato grower a planter far in advance of anything heretofore made. It is a beautiful machine and rapid in its operation. Not liable to breakage, or delay in its operation, simple in construction and **requires but one man to operate it.**

So pronounced has been the success of Planter No. 3, we feel compelled to build it exclusively for the 1908 trade.

Although we are inventing and manufacturing for profit, we are here to subserve the interests of Potato Growers by giving them more than value received.

Aspinwall Plain Potato Planter No. 3

"The exercise of care should be, when planting seed that's cut;
Lest little sets be covered deep, and fail in coming up."—L. A. A.

The Gem of the Potato Field

THIS Gem of the Potato Field will plant from one-quarter to one-third faster than those machines which **require two men to operate** them and with much lighter draft.

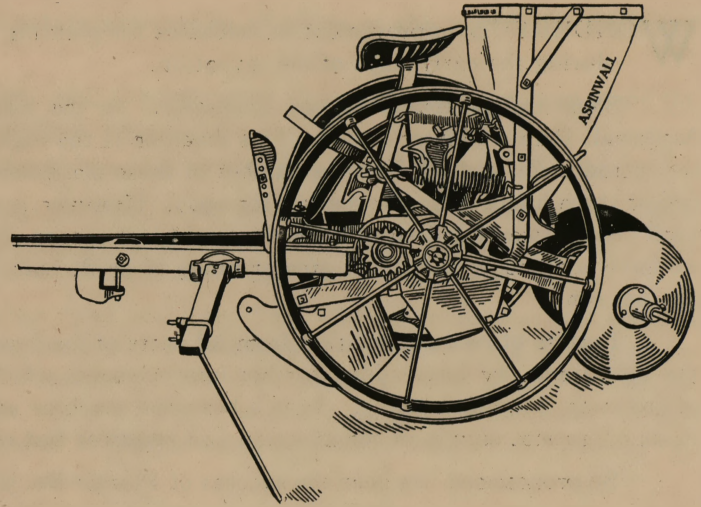
No other planter can compare with it. A marvelous construction with a new picker that drops ninety-nine and a fraction per cent good. With reasonably uniform seed the misses have frequently been less than one in five hundred.

The machine plants a greater range of seed, both as to size and shape, than ever before, and handles it with the least possible friction or wear.

No removal of pickers required to regulate the distance of planting—simply a change of gear wheels, which can be made in less time than it would take to replace one picker.

A Canvas Sack Hopper overcomes all tendency to clog or bridge with either whole or cut seed.

Both the Feed and Coverer Tension are regulated from the seat. No removal of bolts—simply turning a thumb screw does the work.



Progress is our motto. We are not satisfied with "letting well enough alone." We lead, others follow.

The distances of dropping are substantially the same as heretofore, viz.: 11, 13, 15, 17, 20 and 26 inches.

The machines being arranged with gear wheels for planting the above distances, all shipments will be made with gears set for planting 13 inches, including one extra set for 15 inches, unless otherwise ordered. These distances accommodate the majority of potato growers. There are localities where the distances of planting are much greater, including a few where 11 inches is the standard. In such localities, those intending to purchase should specify the distances required when ordering.

If extra gears are required on machines ordered, such are to be paid for at prices named in price list of repairs. If not otherwise advised, all No. 3 planters will be shipped with disc coverers.

All parts are thrown in and out of gear automatically when lowering the plow for work or raising it at the end of each row.

The concaves are yielding and accommodate themselves to different sizes of potatoes, handling either large or small ones with equal facility, without being crushed or injured in the least.

The disc coverers are large and can be adjusted to any desired width or angle, so as to cover the seed shallow or throw up a high ridge and, being flexible, work well on uneven land and dead furrows, up or down hill. The feed is simple and easily adjusted to insure a steady flow of seed from the hopper to the magazine.

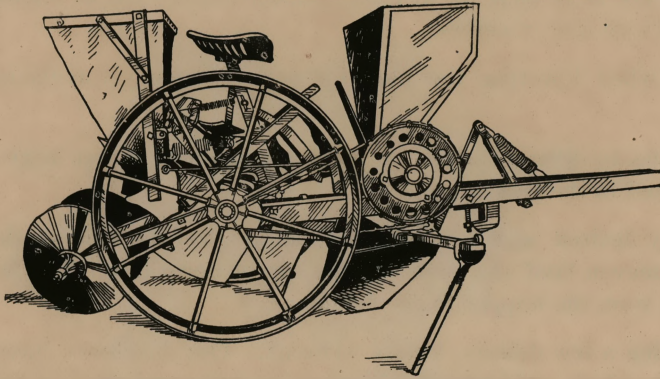
Before deciding to purchase, with the prospect of saving a few dollars, kindly write us. Our machines have a pedigree, consequently are the best. We originate and lead—others copy and obtain many features contained in their machines from the Aspinwall.

We believe in producing automatic machinery; in other words, machines with brains in them, requiring no extra help to correct mistakes.

Aspinwall Potato Planter With Fertilizer and Corn Planter Attachments

OUR Fertilizer Attachment, which has given such excellent satisfaction for the past seven years, will be used on Planter No. 3. The mechanism consists of a rotary force feed, operated by a chain and sprocket wheels. The hopper is provided with an agitator, which prevents bridging or clogging. An index plate shows the proper adjustment for distributing from 200 to 2,000 pounds per acre

with rows 30 and 36 inches apart. Like the Plain Planter, all parts are thrown in and out of gear automatically. By means of a pedal the flow of fertilizer can be shut off at will where portions of the field do not require fertilizing.



No. 3 Potato Planter with Fertilizer Attachment

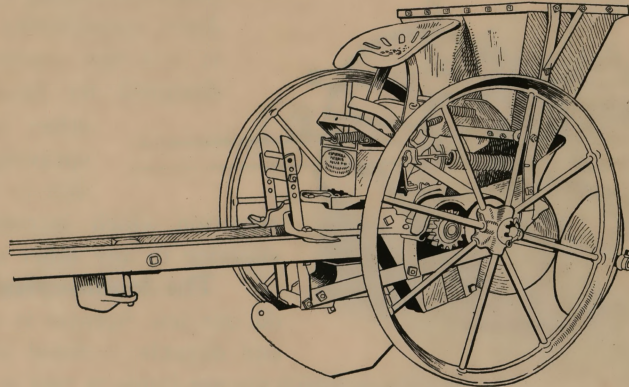
The fertilizer is deposited in the bottom of the furrow, mixed with the soil and covered with fresh earth, upon which the seed is dropped, thus protecting it from injury by contact with the fertilizer. **This feature belongs exclusively to the Aspinwall Planter, and is protected by patents.**

The Corn Planter Attachment will fit either the Plain or Fertilizer Planter, and may be used to plant corn, peas or beans in drills. There are removable slides for dropping the seed. The number of holes indicate the number of kernels to be dropped. The same is true of beans, while the pea and ensilage slides drop promiscuously for thicker

If you are not familiar with the Aspinwall goods, our patrons will extend their courtesies in every way possible.

growth. The distance is measured by means of cams bolted upon the disc in place of the pickers, being the same as for planting potatoes, viz, 11, 13, 15, 17, 20 and 26 inches apart.

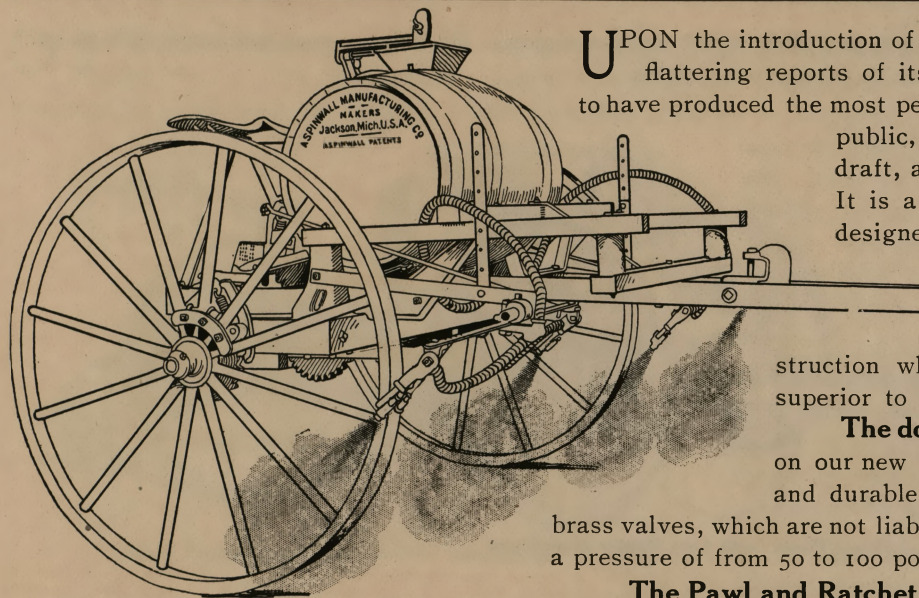
The hopper is divided by a partition with a slide under each division. By using a corn and bean slide in each respective side, hills of corn and beans may be planted alternately.



No. 3 Potato Planter with Corn Planter Attachment

Recognizing the scriptural injunction, "The merciful man is kind to his beast," we have constructed the lightest draft potato machinery in the world.

Aspinwall Two-Horse Double-Cylinder High-Pressure Four-Row Sprayer



UPON the introduction of this sprayer last season (1907) the most flattering reports of its success have been received. We claim to have produced the most perfect automatic sprayer ever offered to the public, including perfection of work, lightness of draft, accessibility of the parts and durability. It is a fine machine well made and especially designed for handling Bordeaux mixture and

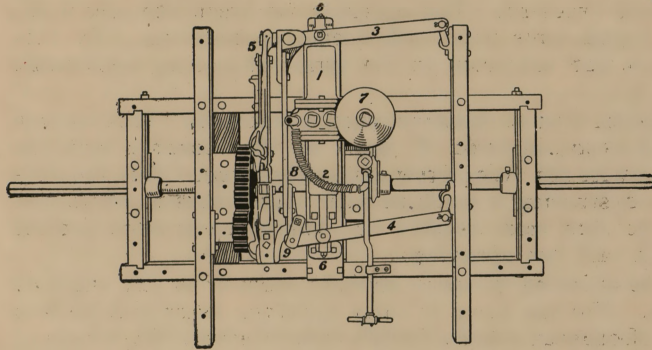
other heavy preparations used in spraying for blight. We invite attention to special features in the construction which increases its efficiency, making it superior to any other sprayer on the market.

The double-cylinder high-pressure pump used on our new Sprayer is simple in construction, strong and durable; is fitted with brass lined cylinders and brass valves, which are not liable to rust or corrode. The pump will give a pressure of from 50 to 100 pounds and can be adjusted as desired.

The Pawl and Ratchet Connections being large start the pump instantly upon movement of the horse. The cylinders have an open end and require no removal of bolts or heads to remove the pistons. The pistons are provided with a device for tightening the packing, simply by turning a nut located outside the cylinders.

A Special Feature not found in other sprayers is an index plate indicating the pressure with the required

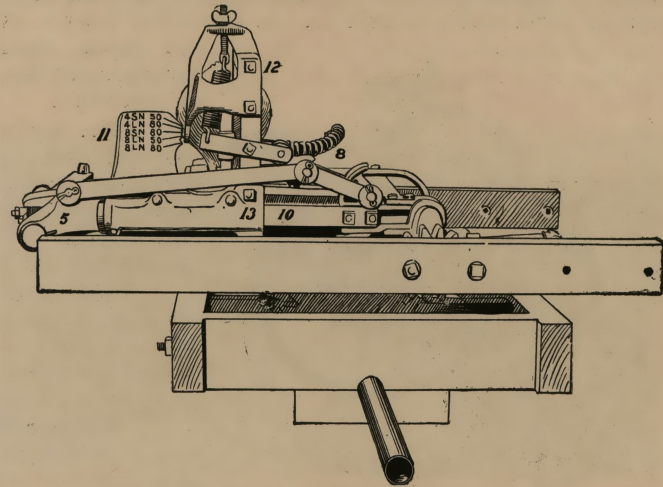
number and size of the nozzles. Another feature contained in this new sprayer is that no water is returned to the barrel. When turning at the end of the rows the solution is simply returned to the pumps; this arrangement obviates the necessity of an extra opening in the barrel which must be kept from leaking. The machines will be shipped with poles, swiveltrees and neck-yoke unless otherwise ordered when shafts will be furnished.



PLAN OF PUMPS AND MOVEMENT

1 and 2—Horizontal open end pump cylinders, 3 and 4—Pump beams with swivel bearings, 5—Pitman connection, 6 and 7—Adjusting screws for tightening the piston packing, 8—Hose through which the liquid is returned to the pump, 9—Crank connecting the gearing.

Vibratory Syphon Agitator. Instead of pumping the mixture through a screen covered hole in the bottom of the barrel or a stationary syphon (which many have adopted to evade our patent covering the special features) we use a syphon hose passing through the barrel at the top, having a vibratory movement, and terminating in an inverted suction screen, constructed of two plates of perforated sheet brass, between which is a quantity of B B shot. This syphon is attached to the paddle agitator, and being constantly in motion affords **no chance for the mixture to clog the screen**, which is a common source of trouble with most sprayers.

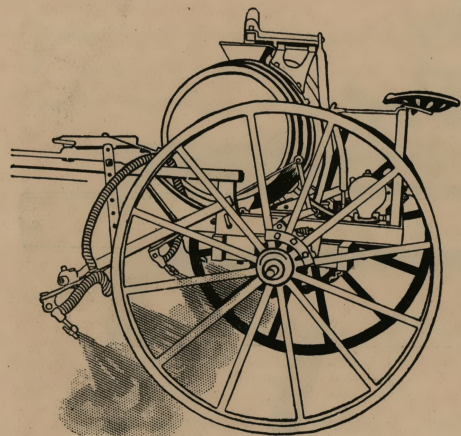


SIDE ELEVATION SHOWING INDEX PLATE, ETC.

5—Pitman connection, 10—Sliding bar in pitman with toggle movement above, 11—Index plate, 12—Adjusting piece for gauging the pressure, 13—Plate enclosing the sliding pitman.

Aspinwall Four-Row Sprayer

nozzles in front, by which the vines may be sprayed to the ends of the rows. The machine is very compact and the working parts easily accessible, (an important feature when making repairs). The operator can reach the seat without being obliged to climb over pipe and nozzle connections. By this arrangement the driver is not subjected to the strain of looking backwards or sideways.



Side view of the Sprayer, showing arrangement for raising and lowering.

Extra nozzles will be furnished for 75c each and double nozzle shanks at 40c each. The regular style Sprayer has a six-foot shaft, which allows an adjustment of the wheels and nozzles for rows from 26 inches to three feet apart. Machines with a seven foot shaft and longer nozzle connections will be furnished when desired at an extra cost of \$2.50.

WIDER range of adjustment than any other sprayer on the market. The popularity and success of the

Aspinwall Sprayer is largely due to an arrangement of the

Mr. Aspinwall was the first to construct such a machine. This feature has met with unqualified approval from all parts of the country, with the exception of one locality where the vines grow extremely large. This requirement has been met by constructing a machine with higher shafts, which not only enables the horse to turn more readily but has given a more perfect adjustment for both high and low spraying.

The nozzles may be adjusted to spray straight down or at any angle to the rear, as shown in cut. For low down or early spraying there will be less waste of Paris Green or Bordeaux, especially in windy weather. By means of pedals the spray can also be directed to cover uneven rows or overcome the effect of side winds.

Rubber Hose throughout. An important improvement is the substitution of rubber hose for tubing and piping throughout the machine. The objection to all metal surfaces, such as steel tanks and tubes, which are exposed to the action of chemicals, is rust, resulting in scales which clog the nozzles.

All machines are sent out equipped with four Vermoral nozzles only.

Study your machines, taking time to learn the working of every part, if you wish to get the most out of them.

Spraying Information

"Exempt from loss are well sprayed fields,
With pests removed the soil a richer harvest yields."—L. A. A.

SPRAYING potato foliage with Paris green to prevent their destruction by bugs, and with Bordeaux mixture to overcome the blight, is an absolute necessity.

The ravages of blight begin with a fungoid growth, which feeds upon the leaves, resulting in complete destruction of the vines and consequent failure of the crop, varying according to the season, locality and soil. Although the disease cannot be entirely overcome, early spraying with Bordeaux mixture will destroy most of the germs and arrest its progress sufficiently to insure in most instances a large yield of potatoes. With early spraying of Paris green to destroy bugs we should mix Bordeaux, thus accomplishing the double result. Taking into consideration that frequent showers will wash it from the vines, spraying once a week at least will be found necessary to maintain a healthy growth of vines.

To Destroy Potato Bugs. Take one-half pound Paris green and add sufficient water to make a paste; stir thoroughly and pour into the sprayer barrel with Bordeaux mixture. If the Paris green is adulterated it will be necessary to use a greater quantity. More Paris green is required with Bordeaux than when used alone. If one-half pound does not kill the bugs use three-quarters of a pound.

Bordeaux Mixture. Slack five pounds of fresh lime in a pail of water, stirring sufficiently to dissolve all lumps. Pour the slacked lime into 25 gallons of water. Dissolve five pounds of blue vitriol (copper sulphate) into



It is the man who most carefully reads and follows the instructions for setting up and starting our machines, that meets with the most perfect success.

25 gallons of water. The vitriol will dissolve quickly if put into a coarse sack and suspended in a barrel of water, keeping it near the surface. To test the mixture, take a half pail of copper solution and fill with lime water, stirring it well. The mixture should be of an intense blue color. If any tinge of green appears, more lime should be added to fully unite with the copper, otherwise it will burn the leaves. The strength of the solution may be ascertained by dipping a polished knife blade in the mixture. If the least trace of copper is found on the blade after a few moments' exposure to the air more lime should be added. When ready for spraying, the copper sulphate solution and lime water should be poured into the sprayer barrel, pouring first a pailful of the copper sulphate solution and alternating with lime water until the barrel is filled.

Where much spraying is to be done time may be saved by using a stock solution. Dissolve fifty pounds of blue vitriol (sulphate of copper) into twenty-five gallons of water by suspending in a coarse sack. Slack fifty pounds of lime

in another vessel and dilute to twenty-five gallons. Two and one-half gallons from each solution will be requisite for one barrel of Bordeaux. Preparatory to using the stock solutions, pour two and one-half gallons of the copper sulphate solution into one barrel containing twenty-five gallons of water, and two and one-half gallons of lime water into another barrel containing twenty-five gallons of water; then pour by alternating a pailful of each into the sprayer barrel until filled, as explained in the previous paragraph. Do not mix the concentrated solutions together, as curdling will result. Do not use iron or steel vessels for any of the above compounds. Use only wood, copper, earthenware or glass.

FUNGICIDES

COPPER SULPHATE SOLUTION

Copper Sulphate...2 lbs. to 50 gals. water
Water.....50 gals.

For use only before the bud opens.

Do not use on growing plants.

BORDEAUX MIXTURE

For Potato Blight

Copper Sulphate.....5 pounds
Fresh Lime.....5 pounds
Paris Green for leaf eating insects...6 oz.
Water, 1 barrel.....50 gallons

INSECTICIDES

KEROSENE EMULSION

To Destroy Aphides on Rose Bushes, Etc.

Kerosene Oil.....2 gal.
Rain Water.....1 gal.
Soap.....½ pound
Dilute before use with 9 parts water

PARIS GREEN AND WATER

To Destroy Potato Bugs.

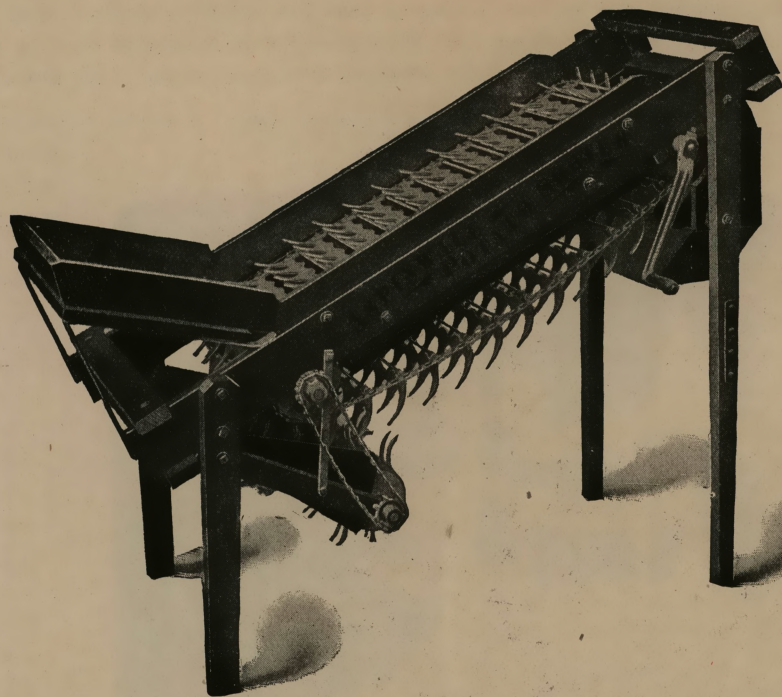
Paris Green.....½ pound
Fresh Lime.....1 pound
Water.....50 gals.

Aspinwall Potato Sorter

WITH this popular machine from 500 to 1,000 bushels of potatoes may be sorted per day. Although the sorting is rapid, it is superior to hand work. A most admirable feature is the low down hopper, making easy work when shovelling and feeding the machine.

In operation the potatoes are carried over an elevator of long distance travel, composed of a series of oscillating plates provided with forked openings through which the small sizes pass, while the marketable ones are delivered through a chute into a sack or basket, as may be provided. The entire work is under control of the operator. Any potatoes which are decayed or ill-shaped may be removed while the work is progressing.

The Sorter makes a separation or sorting into three sizes: The marketable or



Keep your ink thin, and when writing for information or repairs, state what is required, and order by number.

large potatoes; the second sorting or seed (for which a shallow box should be placed in position to receive them), and the third sorting, which falls through with the sand and dirt, in which case a small box with a wire screen could be advantageously used and the potatoes saved and sifted from the dirt.

The dimensions of the sorter are as follows; Length, 54 inches; width, 30 inches; height, rear end, 36 inches, front end, 55 inches; length of sorting bed, 47 inches; width of sorting bed, $21\frac{1}{2}$ inches. The sorting plates are capable of adjustment to $1\frac{3}{8}$ inch, 2 inch and $2\frac{3}{8}$ inch openings, which we have found sufficient to meet all the requirements.



That which costs nothing is worth nothing. That which costs little is worth but little. The Aspinwall machines have been produced at an enormous expenditure of mental effort, time and money.

E. S. Wiesner, Agt.

2^d & 3^d Canal, Pa.

