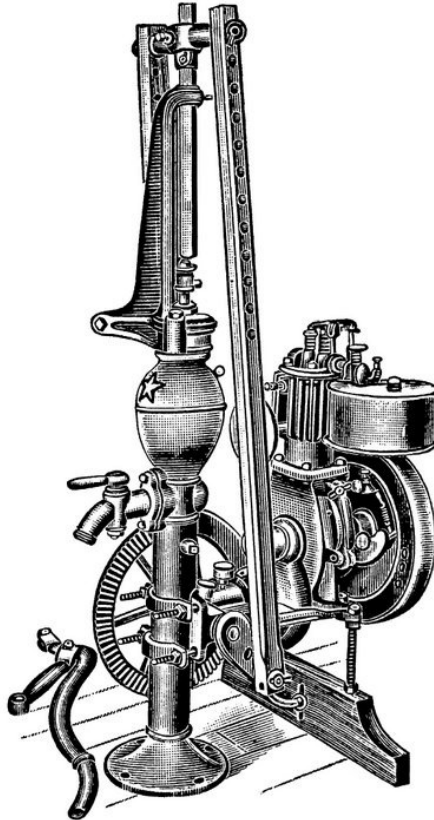


The Fuller & Johnson FARM PUMP ENGINE



Patented June 15, '09. Other Patents applied for

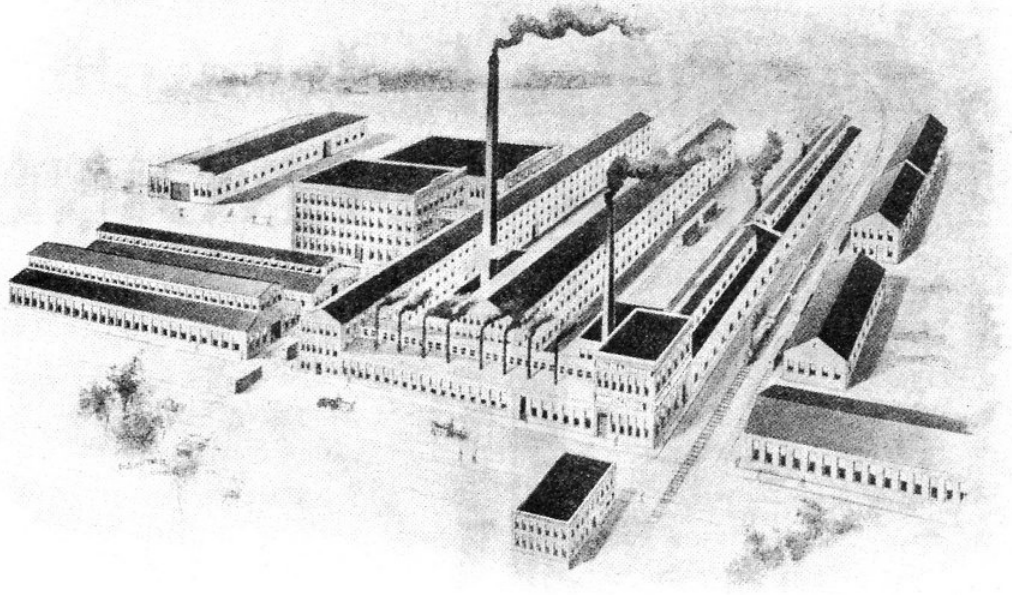
The Farm Pump Engine is the simplest and most compact Gasoline Engine ever constructed. ☞ It is low in price. ☞ It is exceptionally powerful and so well made that if properly used it will run continuously for an average lifetime without trouble, bother or repairs of any kind. ☞ It is fully and definitely guaranteed. ☞ It will be used for some disagreeable task every day in the year, and will be found one of the greatest time and labor savers ever used by the farmer.

☞ An ideal outfit
for country and
summer
homes



Manufactured Exclusively By

FULLER & JOHNSON MFG. COMPANY
MADISON, WISCONSIN, U. S. A.



Birdseye View of the Fuller & Johnson Manufacturing Company

IN the above cut is shown the plant of The Fuller & Johnson Manufacturing Co. of Madison, Wis.

We have been engaged in making standard farm machinery of the highest quality for nearly thirty years. Our **Implements and Gasoline Engines** are known and used wherever **quality** is appreciated at its true value. They will be found in every state and territory in the United States.

The name Fuller & Johnson on an article insures material of the highest quality for the purpose, that the workmanship is superior and that the article itself is the simplest, strongest and most efficient for the purpose that human inventive genius can devise.

You have the assurance that in purchasing anything made by Fuller & Johnson you will receive the greatest value possible to secure for the money, and that the implement purchased will perfectly do everything that is claimed for it, give you long and satisfactory service and (barring accidents or abuse) without breakdowns, expense or worry.

On page 19 are shown sections of the shop that are devoted exclusively to the manufacture of the Farm Pump Engine.

The Farm Pump Engine

THE guaranteed Farm Pump Engine is a small but extremely powerful Gasoline Engine which makes a power pumping plant out of any windmill pump by simply fastening it to the standard of the pump. When five common nuts are tightened the engine is ready to start. It usually takes from ten to fifteen minutes to get it off the wagon, attached to the pump and at work.

One or two turns of the fly wheel will start it, even at 20° below zero, and then all the attention it requires is to supply gasoline and lubricating oil as needed. Once started it keeps right on going until you stop it or the fuel runs out.

It is made for use out of doors in all weather. It will work steadily and evenly, day in and day out, in the hottest days of summer or the coldest days of winter.

Unlike all other engines it needs no special platform. Any good well platform is sufficient. It is self-contained and is complete, ready to put right to work when you get it. You don't have to buy a thing but the gasoline. There are no belts to stretch or slip off—no pump jack is needed—no connections or fittings of any kind to cause worry, bother or trouble.

When not used for pumping, it can be detached, put on a wheelbarrow and taken wherever there is work to be done. It disconnects in no time, and is so light and compact for its great power (weighs slightly over 200 lbs.) that this is easily done. It is supplied with pulley to run separator, churn, fanning mill, corn sheller, feed grinder, grindstone, washing machine, wringer, sprayer, or any other light machinery which can be operated by one to four men.

The Farm Pump Engine is quiet running, and there is practically no vibration. It works perfectly on the barn floor, in the milk house, in



Farmington, Minn., May 3, 1909.

Fuller & Johnson Mfg. Co., Madison, Wis.

Gentlemen,—I installed one of your Farm Pump Engines after our wind mill blew down. It has been doing the work easily and is working fine.

Very respectfully,

JOS. FOWLER.

the kitchen, or wherever it's needed to do a man's work. It's **perfectly safe to use anywhere.**

By attaching a piece of common pipe or air tank opposite the pump spout, or below the platform, to act as an extra air chamber, it will throw a continuous stream of water 40 feet straight up in the air, or about 60 feet on the level. This will go clear over any ordinary building, and is **AN EVER READY PROTECTION AGAINST FIRE.**

This one feature alone makes the Farm Pump Engine an absolute necessity on every farm. It is the cheapest insurance policy you can have.

This feature also makes the Farm Pump Engine invaluable for washing wagons, windows, sprinkling lawns, irrigating, and for other uses where water under pressure is desired.

The Farm Pump Engine runs at a speed of 500 to 600 revolutions per minute (adjustable). The pump stroke has three adjustments—5 in., 7½ in. and 10 in. It will work in a well of any depth in which a windmill can be used. In wells up to 300 feet deep it will deliver from 600 to 800 gallons of water per hour.

These, in brief, are the features of this sturdy labor saver, and convenience for the farmer. All these things and many others we positively guarantee.

The details are given further on.

In considering the Farm Pump Engine, bear in mind that it is made by the great Fuller & Johnson Mfg. Co., of Madison, Wis., which has been making Gasoline Engines and Farm Machinery of the highest quality for over **thirty years**, and which has an unclouded reputation to sustain.

The Farm Pump Engine was rigorously tested in every conceivable way for **nearly a year** before the first one was put on the market. So we know of our own knowledge that it is **RIGHT** in every way, and that with even ordinary care it will last an average **lifetime** without breakdowns or repairs.

Please do not confuse the troubleproof, powerful Farm Pump Engine with the cheap, thrown-together "toys," made solely to **sell**, which are no use except as playthings.

Or, if you or your neighbor have been induced to buy an impractical engine, and, as to be expected, have had constant trouble with it until finally sold for "junk" to the old iron man, **don't let it prejudice you.**

You will be unjust to yourself if you do. For a low powered engine, made **RIGHT**, and **guaranteed** to remain so, as the Farm Pump



North Freedom, Wis., April 12, 1909.
Fuller & Johnson Mfg. Co., Madison, Wis.
Gentlemen,—My Farm Pump Engine is a humdinger and all right in every way. I use it for pumping water. My well is 207 feet deep and the cylinder is 3 feet from the bottom of the well and there is 70 feet of water and it pumps it out without any trouble. There is no use of my giving your engine much praise for the reason your engine will talk for itself.
Yours respectfully, GEO. SULLIVAN.

Engine is, it will be found one of the handiest labor saving tools you ever had on your farm. Remember the guarantee on page 13 is a genuine Fuller & Johnson promise to you.

Compared with a Windmill

We honestly believe that the Farm Pump Engine is one of the biggest labor savers ever used on a farm.

It does so many things and does them all so well, that you'll find it a **real economy** to own one, even if you have only a small farm and but a few head of stock.

On a big farm several can be used to advantage, even though you have already installed a high powered engine for doing the heavy work.

Primarily the Farm Pump Engine is designed to take the place of a windmill.

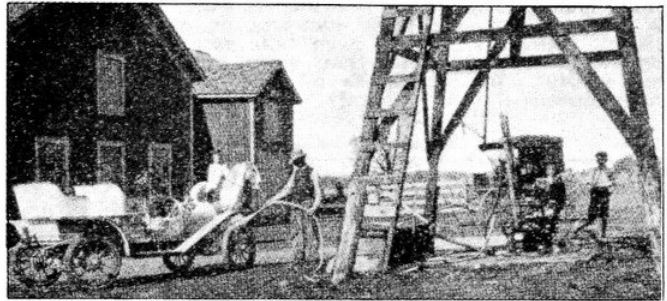
The windmill is fast disappearing from the prosperous farm, and the Farm Pump Engine is taking its place for many very good reasons.

The Farm Pump Engine costs so little, is so easy to attach to the pump, so economical to run, and so sturdy and persistent in whatever it's put to do, that there is no comparison. And it must not be forgotten that the Farm Pump Engine is ready in an **instant** whenever you need it.

The disadvantages of a windmill are well known to every user. Yet it will do no harm to repeat them.

Perhaps the most discouraging feature of all is the uncertainty of the wind itself. When the weather is the hottest, and the stock needs the most water, the wind persists in staying in some other part of the country for **weeks at a time**. You who have had the experience of pumping by the hour under such conditions, the perspiration streaming from every pore, will require no further argument as to the actual **NEED** of the farmer for the Farm Pump Engine.

Then again, no matter how solidly your windmill may be installed, you are never free from danger of **total loss**. The first high wind that comes along may wreck windmill, tower and all, and leave it on the ground a mass of twisted iron and steel, or else whip it around and strain it until you have a big bill to pay for putting it back in



Rushville, Nebr., May 29, 1909.

Fuller & Johnson Mfg. Co., Madison, Wis.

Gentlemen,—I purchased one of your Farm Pump Engines about a month ago and it is a little beauty, and better still,—it works to perfection. I took down a 12-foot three-year-old windmill when I attached the engine and now have water any time wanted and plenty of it. Over a hundred people interested in water supply have called to see the little giant work, and many here have expressed the belief that this is the beginning of the end of the unreliable and cumbersome windmill. I use a lot of water to irrigate my lawn and trees and usually when I want it worst the wind and my windmill was idle. Now I am getting all I want, when I want it. You will surely receive a lot of orders from this section soon.

Yours very truly, D. F. VAN VLECK.

repair. The agricultural papers tell us that many **hundred thousand dollars** will be required to replace the windmills blown down in the blizzard of February 1909 **alone**. Forty-six were counted on the ground and smashed beyond repair in going a short distance on the train the week after this storm.

The Farm Pump Engine entirely removes this possibility. It is unaffected by wind or weather, and is built so sturdy and strong that it will last an average lifetime.

The Government Experiment Stations are condemning the windmill for the **very purpose for which it is intended**, viz.: the watering of stock. It is customary for large dairymen to store water in tanks as a provision against the inevitable days when the wind does not blow. Such water becomes **stagnant and unfit to drink** in a very short time. It is lukewarm and unpalatable to the stock. It becomes filled with alga growths which are as bad for stock as anything mouldy is for human beings. The result is seen in reduced milk flow, often intestinal trouble; and the health of the whole herd suffers, often to the extent that the veterinary is needed.



Kellogg, Minn., May 11, 1909.
Fuller & Johnson Mfg. Co., Madison, Wis.
Dear Sirs,—Find enclosed check for three engines, two we got and the other is coming. We put one of these pumers on a 320-foot well and it don't even take more explosions while pumping than when running empty. We are much pleased with the pumper.
Yours truly,
HONER & McNALLAN.

In the winter the results are almost if not quite as bad. Stock should never drink ice water. It unsettles the digestive organs by chilling them, cuts down the milk flow and induces an unnatural and unhealthy appetite. Yet every time you chop a hole through the ice in your stock tank, **you are compelling your stock to drink ice water** and are freezing the dollars right out of your pocket. With the Farm Pump Engine you can have pure, fresh water, right from the well at watering time in any quantity you need, and at just the right temperature to be most relished and most healthful for man or beast. When attached to the ordinary windmill pump the Farm Pump Engine will supply 800 to 1,000 gallons an hour.

A better idea of how vitally important this pure, fresh water question is to you in dollars and cents can be readily seen from report of the tests made by the Wisconsin Agricultural College.

A windmill is suitable for pumping water and **nothing else**. To be sure the different windmill makers furnish attachments to equip a windmill for doing the churning and other light work, but the wind itself is so unreliable that they are makeshifts at best. Particularly is this true when it is remembered that the windmill is usually **out in the lot**, where there is a free wind sweep, and that it **cannot be moved**. The Farm Pump Engine is so easily disconnected, and so convenient to move around that it can be **taken where the work is** in no time.

after the stock trough is filled. It is equipped with pulley to drive all sorts of light machinery, and has plenty of power to drive anything which is ordinarily run by hand.

It was perhaps unnecessary to point out to you, who know so well its failings, what an **unreliable** source of power a windmill really is. It only does the work it is **supposed** to do when a breeze is blowing, and then, very often, in an irregular and unsatisfactory manner.

We believe this shows you so clearly that you must be **convinced**, that the Farm Pump Engine will do everything that a windmill will do, and far **quicker, better and more satisfactorily than a windmill can ever do it.**

And, what is of still more vital importance, the Farm Pump Engine will make you a **Free Man**—your **own boss**, and entirely independent of the whims of wind or weather. It is dependable and reliable, always ready at an instant's notice to save your time and your muscles when the need arises.

Danger from Windmills

The list of those who have been killed and injured in windmill accidents is appalling in its length. The money loss is tremendous.

We looked up statistics for two years only. We confess to being astounded. In that comparatively short time literally thousands of farmers have been killed, maimed or crippled for life by accidents which occurred when oiling or fixing the windmill head. A sudden change of the wind has caused the mill-head to turn suddenly, sweeping the far-

mer to destruction. Clothing has been caught by gears or bolt heads, when working many feet up in the air, with serious or fatal results. Foothold has been missed on icy ladders or platforms—dozens of other accidents all from the same cause—the windmill.

From these statistics we know that we are not exaggerating a particle when we say as earnestly as we know how to put it, that **THE MAN WHO CLIMBS TO THE TOP OF A WINDMILL TOWER TO OIL OR FIX THE MILL IS ACTUALLY TAKING HIS LIFE IN HIS HANDS.**

Nor is this by any means the only danger. Dozens have been in-



Liberty Pole, Wis., May 18, 1909.
Fuller & Johnson Mfg. Co., Madison, Wis.

Dear Sirs,—I have been using one of your Farm Pump Engines some time, one of the first ones you sent out. It is just what I had been looking for for years, as I am too old to climb windmill towers. I never had any experience in using gasoline engines, but I have no trouble with yours, and the longer I use it the better I like it.

Yours truly, J. HIGGINS.

jured in the last two years by parts which have become detached and have fallen—many fatally.

Falling windmills during 1908 alone caused losses amounting to thousands of dollars, not counting the loss suffered in the windmill or tower in the calculation.

A recent issue of a New York state paper refers to the death of two little children, caused by the big 10-foot mill crashing through the roof and crushing them as they slept.



Chillicothe, Mo., May 20, 1909.
Fuller & Johnson Mfg. Co., Madison, Wis.
Dear Sirs,—I bought one of your Farm Pump Engines from F. C. Vesperat of Chula, Mo., and yesterday I built a shed over it. So far I am entirely satisfied with the work it does and if it holds out this good I wouldn't part with it for anything.
Respectfully,
MAJOR VESERAT.

Buildings have been wrecked, valuable stock killed, fruit trees destroyed and fences broken down by falling windmills. This loss alone foots up to a surprising sum.

Consider this carefully. Is it really worth while to have such a constant menace as a windmill on your farm, knowing all the time that today, or perhaps tomorrow, you or yours may meet the fate of the hundreds whose cases we have mentioned?

Your wife, your little one, or you yourself may be the next one to be killed or crippled for life.

This is not a pleasant subject to think about or to talk about—but we have stated the **FACTS**.

Should the fact that your windmill has stood for many years keep you from insuring yourself and your family against accidents and loss?

Does the fact that your house never burned down keep you from insuring it?

Compared with High Power Engines

Please do not understand that the Farm Pump Engine is designed to replace the higher powered Gasoline Engine for use on the farm. Quite the contrary.

The high powered engine has its own particular field of usefulness. Nothing can supplant it. It has its own particular work to perform, and is thus in a class by itself.

This is equally true of the Farm Pump Engine. The duties of the two types do not overlap to any appreciable extent. There is a **well defined need for each** on every up-to-date farm.

Here, for instance is a good comparison.

There is the same reason for having both types of engine as there is for having a heavy wagon for hauling **big loads** and for field use and a light Democrat wagon for marketing, and other **one-horse work**.

It is unprofitable to use the heavy wagon for light work. It takes two horses to draw it. The labor of one horse is wasted. The trip must be made slowly, and this wastes time. The light wagon will make the trip with one horse far quicker, and will carry the load of eggs or truck, and bring back the sack of flour and box of groceries quite as well as the big heavy wagon could do it.

And, on the other hand, it would be a waste of time and effort to attempt to use the light wagon and one horse for hauling grain to the elevator, or bringing back a ton or two of fertilizer.

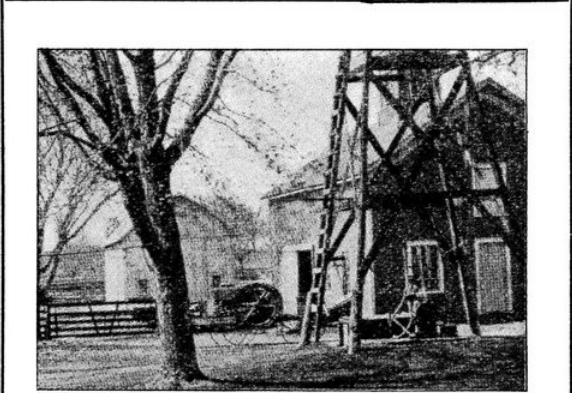
To sum up briefly the advantages and uses of both the high power and low power gasoline engine:

You need a high power engine whenever there is a long, heavy job of work to be done, such as sawing up the winter's wood, running the grain separator, the corn shredder, filling the silo, running the large size corn sheller, or the power feed grinder. Any machine which is sold to be driven by power requires a Gasoline Engine of from 4 to 16 horse power to do the work economically and satisfactorily.

But for pumping water in particular, and for running any machine sold to be run by hand power, the Farm Pump Engine is supreme. It will do such work perfectly, and at a far less cost for fuel and oil than the larger engine. It is so light in weight that it is easily taken from one job to another on a wheelbarrow or barrel truck

by **one man**, and can be used for dozens of jobs all over the place where it would not be practical or economical to take a high powered engine, which, even if of the portable type, must be drawn by two horses.

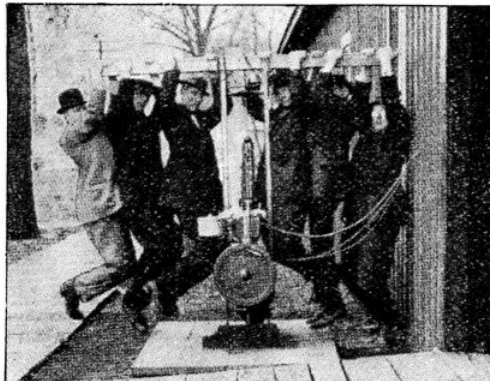
Hardly a day will pass on any farm, no matter how small, when the Farm Pump Engine will not save from one to several hours of the hardest, most monotonous and disagreeable work you have to do.



Denmark, Wis., May 6, 1909.
Fuller & Johnson Mfg. Co., Madison, Wis.

Gentlemen,—Six years ago I bought one of your 6 H. P. Engines for drilling purposes. Have used same continually seven winters and summers, at times when the thermometer was 20 below zero.

On account of the satisfaction given me by this engine I ordered the first Fuller & Johnson Farm Pump Engine in this locality. Best I can say is that I am as well pleased with the pumper as with the larger engine. Yours truly, THOS. MEEHAN.



Tie a piece of 2x4 across the head and try this for yourself. The engine with such a load will run easily.

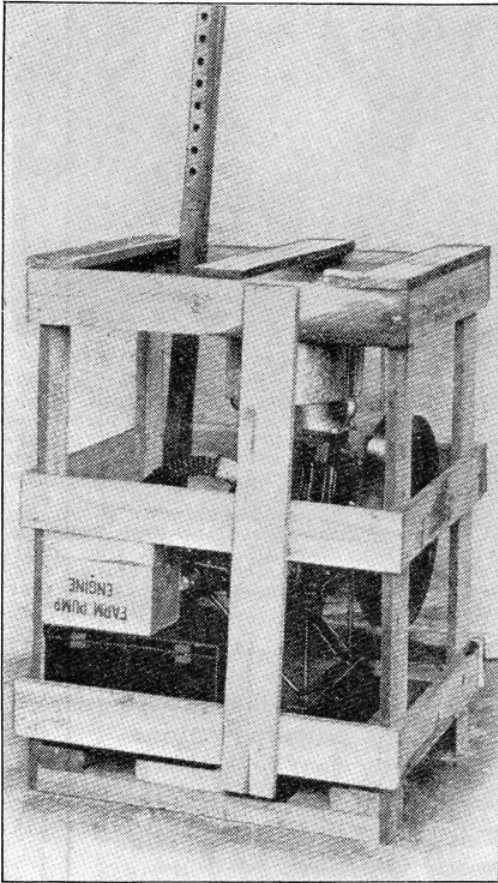
Is it any wonder that many of our customers refer to it as the "LITTLE GIANT."

Everything But the Gasoline

When you buy a windmill you possibly buy it complete; but the wind is necessary,—that you can't buy. What good is a windmill without it?

When you buy a **Farm Pump Engine** you buy everything that you need to run your pump but the gasoline,—you can buy that anywhere.

It is not necessary, as is the case when you purchase all ordinary engines, to go to a half dozen places and purchase fittings before you can pump a drop of water; **every single thing** you need to connect the **Farm Pump Engine** to an ordinary pump is in the packing box.



The Farm Pump Engine as it reaches you.

You don't have to go to town and hunt up the belt man to buy a piece of belt and lacing—to the cement man and buy cement for the foundation—to the hardware man and buy foundation bolts—to the lumber yard and buy planking for a new substantial platform, and when you get home, look around for a sufficient quantity of stone to make the foundation, then after you have done all these things find that you have missed just some little insignificant thing that is absolutely necessary before you can pump water and have to "hike" back to town for it.

It may be only a little something, but if you use any other engine than the **Farm Pump Engine** you may find you absolutely must have it.

Remember the **Farm Pump Engine** attaches right to the pump. The strain of pumping is not upon the bolts or screws connecting the pump body to the platform as is the case with the windmill or where you use some sort of a walking beam arrangement with the ordinary engine. In such an

arrangement quite a little power is consumed in the effort of the engine to separate the pump body from the platform.

In the **Farm Pump Engine** there is nothing of the kind; it attaches direct to the pump body itself and the entire energy of the engine is applied directly to the pump rod. **Everything** considered, the **Farm Pump Engine** is the cheapest power you can buy.

WHEN YOU BUY A FARM PUMP ENGINE YOU BUY A COMPLETE OUTFIT.

The Price and the Reason for the Price

The price of the Farm Pump Engine is \$70.00 free on board cars at Madison, Wis. You will be interested in knowing how it happens to be just this figure.

There are only two ways of fixing a price. These depend on what you are trying to accomplish.

The first way—and the one most frequently adopted nowadays by most manufacturers—is to decide on a price first, and then try to make the article within that figure. The price is usually the same or a trifle under what some other article of a similar kind is being sold for. If they can't "make the price" the first time, then something is left off here, and something cheapened there, until finally they are able to turn out the article at the price they have in mind.

The reason for going about it in this way is that unfortunately a great many people consider **PRICE** and nothing else when they buy. The one who has the lowest price sells the most goods **FOR A TIME**. Many manufacturers are content to do business on this basis. They can sell such truck—and that is what they are in business for—to sell their goods. They are not concerned about how unsatisfactory the goods may be once they have sold them.

This way of fixing a price will always prevail as long as there are some women who will buy moth-eaten merchandise at basement bargain counters, and as long as there are some men, who ought to know better, who buy smutty or mouldy grain for their stock on the short-sighted idea that they are "saving" a few pennies or a few dollars.

The second way of fixing a price—and in our experience the only **RIGHT** way is to make our products as good as we know how, using our brains and our mechanical skill to produce that good article as economically as it can be made. Then we figure out carefully what it costs us to make it, add on a fair and square profit, and the sum is what we charge for that article.

This is the way the price on the Farm Pump Engine was made. We could cut this price at least **HALF** if we wanted to use scrap iron with all the life and strength burned out of it in place of costly gray iron right from the ore—or if we wanted to use soft Bessemer steel or cast iron in place of the high power automobile steels for shafts and connecting rods—and in many other ways.

But such an engine wouldn't be a credit to us, and it wouldn't give satisfaction to you for more than a very short time at most.

We preferred to make the Farm Pump Engine **RIGHT**, charge a **FAIR PRICE** for it, and have the satisfaction of knowing that it will give you such satisfactory service for an average lifetime that you will gladly recommend it to your friends, and know that you are doing them a favor by making this recommendation.

LISTEN TO THIS!

The Farm Pump Engine Speaks for Itself

I AM the Farm Pump Engine.

My business is pumping water and I'm always "on the job."

When I get a grip on a standard pump, you can't pry me loose with a crowbar.

Whether it's 30 degrees below zero or 90 in the shade it's all the same to me.

I simply pump 'til you shut me off or I've used up all my fuel. I'm a stayer.

I'm a quiet sort of fellow—but I'm right there with the **POWER**.

A little proud of myself, but haven't I a right to be when thousands of farmers and their wives are throwing bouquets at me?

You see, it's this way:

The farmers needed an engine that was light and handy and would run a pump—right off the reel—without having to be anchored to a cement foundation like a tombstone, and harnessed up with a pump jack and other contrivances.

They were sick and tired of windmills, on which they could never depend.

So here I am—the only engine of the kind in existence. The hardest worker for my size that ever came out of an engine factory.

I can lift half a ton at every stroke—and keep it up at the rate of 35 strokes a minute as long as I have oil and fuel.

I have pumped under all kinds of conditions on wells from 10 ft. to 600 ft. deep and I'm not afraid to tackle most any old kind of a pumping job.

I've got more square inches of efficient radiating surface than any other engine on earth. That's why I never get overheated and have trouble with my insides.

I'm here to help the farmer and his wife and the hired help. The busier I am the better I like it. Just for a change, I'll run the cream separator, or wash the wagon, or turn the grindstone, or run the feed cutter or the fanning mill. I'm a good "all 'round" worker. Give me an extra air chamber and I'll water the lawn or garden or throw a stream higher than a house.

In case of fire I'm right there to save life and **PROPERTY**. I'm an insurance policy and a fire department—ready for all emergencies.

I was introduced to the public only three months ago and we're getting acquainted mighty fast. I get a bigger mail than any ten other gasoline engines.

I haven't met you as yet, but when I do I'll bet we'll be the greatest friends ever. You've got the work and I want the job. Show me your pump and I'll make it hump.

Yours truly,

FARM PUMP ENGINE.

OUR GUARANTEE

Backed by a reputation gained in 30 years manufacturing Farm Implements and Gasoline Engines

Because the Farm Pump Engine has been so rigorously tested and tried (really abused) under far more severe conditions than it will ever be called upon to meet in actual use we are able to put behind it a **GUARANTEE OF UNHEARD-OF BREADTH AND LIBERALITY.**

To those who think as they read, this **GUARANTEE** alone will speak more convincingly for the real sturdiness, power and dependability of the Farm Pump Engine than all the pages of facts and interesting details which we have given you to consider.

WE GUARANTEE the Farm Pump Engine to be free from defects in material and workmanship, and will replace at our factory without charge at any time within one year from date of purchase any part which may become broken because of imperfect material or construction.

WE GUARANTEE the Farm Pump Engine to pump water from a well of any depth which a windmill pump will handle.

WE GUARANTEE the Farm Pump Engine to run any machine which is sold by the makers as a hand power machine.

WE GUARANTEE the Farm Pump Engine with reasonable care to run without trouble or bother as long as kept properly lubricated and supplied with clean gasoline.

WE GUARANTEE the Farm Pump Engine to start easily and run smoothly in the coldest days of winter, and to run continuously and without overheating on the hottest days of summer, if kept properly oiled.

IF THE FARM PUMP ENGINE FAILS IN ANY OF THESE PARTICULARS, WE WILL REFUND THE MONEY PAID, and give instructions as to the disposal of the engine, upon satisfactory proofs being submitted to us of its failure to meet these conditions.

It being distinctly understood, however, that we are not to be held responsible under this guarantee if instructions are not followed, or for injury or failure to work satisfactorily, as the result of accidents, failure to keep the engine properly oiled, or other carelessness or abuse.

FULLER & JOHNSON MFG. CO.

Anyone Can Afford the Farm Pump Engine

Any man who places the slightest value on his time will find the Farm Pump Engine the best paying investment he ever made, to say nothing of the comfort and convenience of having all the tiresome and disagreeable chores done by power instead of by "main strength."

If you have so few head of stock that you don't even use a windmill, you can still afford the Farm Pump Engine, for it will save you time and money in so many ways aside from pumping that it will pay for itself in a short time. And then, for years afterwards, will earn money for you by saving it, for the Farm Pump Engine is so well and strongly made that it will keep on running day in and day out without troubles, breakdowns or bother for an average lifetime.

You can far better afford a Farm Pump Engine than almost any other labor saving tool on your farm.

Because, for the most part, these tools can save your time and your muscles for only a week or two out of each year. The Farm Pump Engine is an every day help, and will do some disagreeable job for you, weekdays and

Sundays, on every one of the 365 days in a year.

Let us figure it out in dollars and cents.

We will forget pumping (the principal use of the Farm Pump Engine) entirely. This will be thrown in for good measure.

Take your cream separator as a single example.

It takes an hour, morning and night, to separate the milk on an average farm.

That's two hours a day.

Your time is surely worth 15c. an hour at the very least. Probably many times that, but we will keep it low, and use that amount as a basis for figuring.

So, you see, it costs you at a low estimate 30c. a day to separate by hand.

You have it to do 365 days in the year.

In other words, it costs you \$109.50 each year to run the separator by hand, figuring your time worth only 15c. an hour.

The Farm Pump Engine will cost you only \$70.00 f. o. b. Madison.

The cost of Fuel and Oil to run it two hours a day for a whole



Neillsville, Wis., Apr. 26, 1909.
Fuller & Johnson Mfg. Co., Madison, Wis.

Dear Sirs,—During the time I have had the Farm Pump Engine I had it hitched to a 6" circular saw, have cut complete 125 bee hives and as many sugar-rims in about four days. I can rip 1" lumber at the rate of about 25 lineal feet per minute and 2" stuff half as fast. Shall run my honey extractor with it also. It has never refused to go and stays going. Have never seen its equal for workmanship, strength of parts, and amount of power for its size.

Respectfully yours,
ERNEST EGGEMAN.

year will amount to between \$4.00 and \$5.00. We will call it \$5.00, to make it as big as we can.

Now total it up, and see what we get.

Notice that the Farm Pump Engine has not only paid for itself but has actually earned you **\$34.50** in a single year in running one single implement.

In other words, if you gave away the Farm Pump Engine at the end of the year you would be **away better off** through having bought it.

And don't forget that all this time the Farm Pump Engine has been supplying you with **all the water you need** at just the time you needed it—and that we haven't counted this in our figuring at all.

Check these figures over again, for they mean a great deal to you. And remember that the Farm Pump Engine will not alone run the separator in addition to pumping, but will **run any machine about the place** which is ordinarily run by hand, and that it will not only do this for a year, but for an **AVERAGE LIFETIME**, without repairs, trouble or expense except for fuel or oil.

You know the work you have to do better than we do.

Take a pencil and paper and figure out for yourself what it would mean to you personally in **time** (which is **money**) to have the Farm Pump Engine do this work for you.

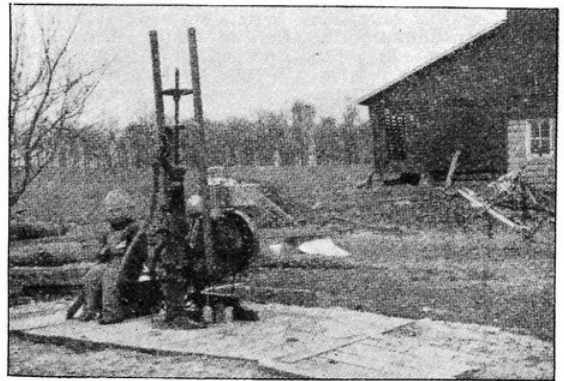
If you will simply do this, it is all we ask, for then your **own interest**, and the money you will save as shown by your **own figures** must decide you to place your order for a Farm Pump Engine next time you go to town.

The Farm Pump Engine Keeps the Boys on the Farm

What is it that makes the boys dissatisfied with farm life and drives them to the cities?

The farm journals have printed page after page on this subject. The magazines have frequent articles about it. It is one of the conditions and problems which the Government Commission is investigating and sifting to the bottom.

We have read dozens of arguments—seen hundreds of letters from the farmers about it. It interests us because our interests and those of the farmer are identical. The farmers are our patrons, and hundreds of them through long acquaintance are **warm personal friends**.



Black River Falls, Wis., April 1, 1909.
Fuller & Johnson Mfg. Co., Madison, Wis.
Gentlemen,—The Farm Pump Engine recently received from you was quickly sold to E. M. Winslow, one of our most progressive farmers, who had previously decided to buy one of the cheaper pumping engines sold at about half of the price of yours. When he saw the two kinds side by side it took him only a few minutes to decide in favor of yours.

Yours truly, BENSON & CO.

Boiled down into small space, the reason for this wholesale deserting of the farm by our boys is this:

Since hired help has become so scarce, high priced and hard to get, the most disagreeable chores about the place fall on the shoulders of our boys.

When the windmill is out of commission, or the wind doesn't blow, who is it that pumps and pumps until his back is nearly broken?

When the axe or the scythe has to be ground, who is it turns the grindstone?

When the woodbox is empty, who gets busy at the bucksaw?

When there is grain to be cleaned, who turns the fanning mill?

After the milking is done, who turns the separator while "pa" pours in the milk?

Isn't it Freddie, or Willie, or John?

Is it any wonder that the job of the clerk in the drygoods store, or the machinist at the lathe, or almost any kind of a city job looks awfully good to him who has all the mean chores put on him as his share of the work—not merely once in a while, but every day in the year.

Think this over.

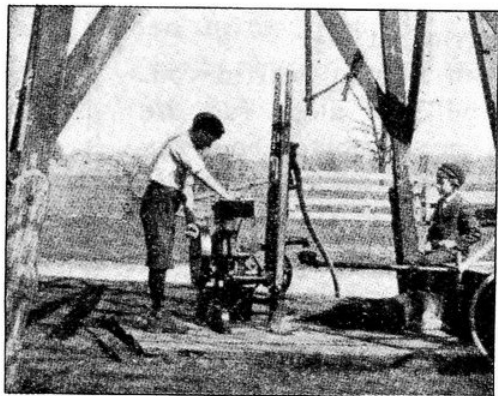
Eighty out of every hundred of those who have answered the question: "Why do the boys leave the farm?" have mentioned the **CONSTANT DAILY GRIND OF THE MEAN CHORES** as the principal reason. There were other reasons, to be sure—some mentioned frequently—some only a few times. But the reason given by 80 out of every hundred was **CHORES**.

If you don't care for the Farm Pump Engine as a time and money saver for yourself—or if you don't care for it to save your **OWN** back and muscles—

Let **IT** do these mean, disagreeable chores. It will go a long way towards making your boy satisfied, contented, willing to follow in your footsteps, and finally settle down near you, to be a companion and staff in your old age.

The boy can look after the Farm Pump Engine and run it just as well as you can.

Don't forget the "wimmin' folks" either. It will mean a lot to them to have the washing machine, the wringer, the churn, and the other machines that come in their department run by power instead of by "main strength."



Muscoda, Wis., May 7, 1909.
Fuller & Johnson Mfg. Co., Madison, Wis.
Gentlemen,—We put one of your Farm Pump Engines on a 250-foot well and it just plays with the pump. It does not seem to exert itself at all pumping this well. We expect to sell a bunch of them.
Yours truly, E. J. SCHWENGLER.

Obstacles We Overcame in Inventing the Farm Pump Engine

These are the requirements of the **Ideal Engine** which we had before us as a sort of "Ten Commandments" when we started to design the Farm Pump Engine.

Later on we will explain how we met these requirements in the Engine itself.

1. It must be made so **simple and free from complications** that anyone, without the slightest mechanical knowledge, could understand it, start it, and keep it going for **years**, without trouble or bother.

2. It must have every part in such perfect harmony with every other part that it will **start readily** winter or summer and develop full power without fine or delicate adjustment of the gasoline valve. On many engines the gasoline valve must be set in one **exact position** before the engine will start. This position changes as the weather is warmer or colder. Such engines will often have to be cranked for half an hour before the gasoline valve can be set to exactly correspond with the thermometer at that particular moment. Then only can the engine be made to start.

3. It must be made so sturdy and troubleproof that it will **work outdoors in all weathers**, and not be injured or caused to stop work by dust, rain, snow, sleet or hail, intense heat or zero cold. Furthermore, it must be able to withstand these severe conditions **continuously year after year** for an average lifetime.

4. It must be so free from vibration when running, that it will require no special foundation or supports, but will work perfectly on any well platform or ordinary floor. The cost of cement and other foundations required by most engines, figures up into a good round sum.

5. It must be so compact, and so easily taken from one place to another, that it can be moved from the field to the barn, or to the kitchen, or to the milkhouse in a few minutes' time.

6. It must have every part so handy and accessible that fuel can be added, oiling attended to and the engine started **without the necessity for stooping**. It's a nuisance to have to crawl around on hands and knees to attend to such work.

7. It must be made so that it will be absolutely **safe** to run any-



Memphis, Tenn., May 25, 1909.
Fuller & Johnson Mfg. Co., Madison, Wis.
Gentlemen,—The Farm Pump Engine purchased from James Butler & Son of this city has given perfect satisfaction. In the past month it has used less than 1½ gals. of gasoline.

We pump water for 25 cows, 5 horses, 4 hogs, besides the water for home, and cleaning purposes in the dairy, cooling milk, etc.

I have run it steadily and have never had any trouble with it, either from overheating or failure to run perfectly.

I have spent 29 years in the dairy business and have never found anything to equal it as a labor saver.

Yours respectfully,
W. C. HYATT.

where **without danger of FIRE**. Possible leakage of gasoline must be provided against. No spark or flame must come from the engine, even in inexperienced hands. Fire is a possibility which is dreaded on every farm.

8. It must have all the gears and other moving parts with projections back out of the way, so that a woman or child can attend to the engine **without the slightest possibility of getting the clothing caught or fingers, hands or limbs injured**. This is a grave defect in the many cheap "toy" engines on the market, made solely to sell, without regard to the safety of those who are to use them. Fans and uncovered gears make them dangerous for anyone but a man to run, and a careful one at that.

9. It must have some provision for throwing a steady, constant, powerful stream of water **direct from a windmill pump**, not only as a constant protection against **FIRE**, but to make it possible to wash wagons and windows, and do other work for which water under pressure is needed. This accomplished, and the large, expensive storage tank is unnecessary.

10. It must be entirely automatic in its action, so that it will **care for itself** when once started, and require no further attention than to supply fuel and oil. It must also be **automatically governed**, so that neither electric current or gasoline will be wasted on the idle strokes. when explosions are not needed to keep up the speed.

If you know anything about gasoline engines, you will at once realize the herculean task we had laid out for ourselves.

Mechanical engineers without number told us that we were striving for an impossibility.

For a long time we ourselves were afraid this was true—for it seemed impossible to design an engine which was not lacking in **one or more** of the requirements we had set ourselves to meet. But we persevered, "making haste slowly."

We have been years at the task of designing our "ideal" in an engine. Literally **thousands of dollars** have been expended in making experimental engines, which, after testing, were discarded. Each one, however, taught us something—brought us that much nearer to our "ideal."

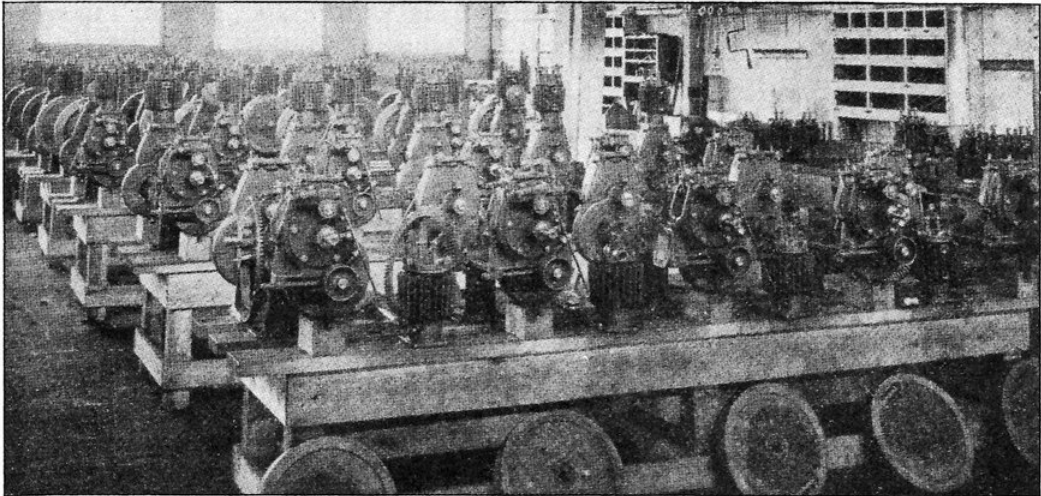
Until finally the most rigorous tests assured us that the **last obstacle had been overcome**—that we had **SUCCEDED**.

We named this long-worked for success the Farm Pump Engine.

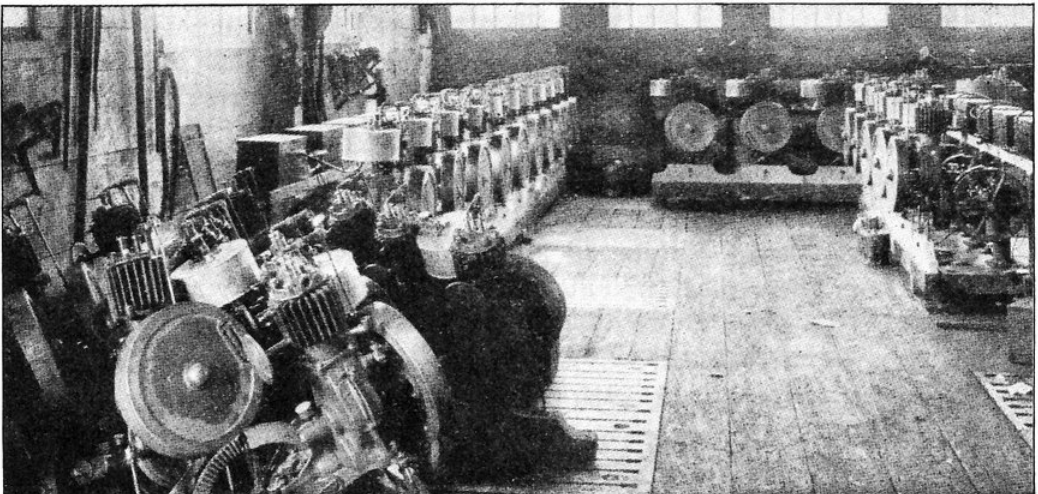
Nothing like it has ever been built before. We do not believe that anything so sturdy, troubleproof, dependable and durable can be made in the future by anyone but ourselves because of patent protection.



Corner of Machine Shop where parts are machined up.



Portion of Erecting Floor.



Testing Floor—every engine carefully tested.

Details of Construction

Operation

THE Farm Pump Engine operates on the four cycle principle, which long experience has shown gives the greatest power for the amount of gasoline used. When correctly made, engines constructed on this principle are notably trouble proof, and wonderfully long lived.

What is meant by the four cycle principle is briefly this: The piston of the engine makes four movements—two up and two down (which means that the fly wheel makes two complete revolutions) between each power impulse.

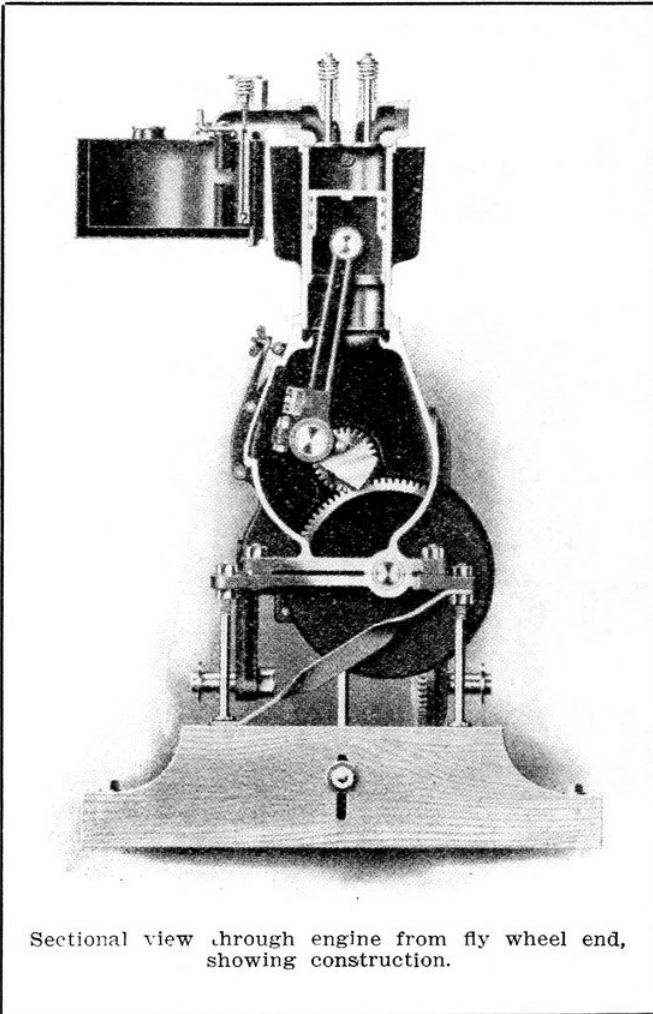
First stroke—The intake valve opens and the piston moves downward, acting as a pump, to draw into the cylinder a mixture of gasoline and air.

Second stroke—The piston moves upward and compresses this mixture into a small space. Both valves are closed.

Third stroke—An electric spark explodes the compressed mixture, and forces the piston downward. This is the power stroke.

Fourth stroke—The exhaust valve opens and the piston moves upward, forcing out the gases which the explosion has created.

The Farm Pump Engine has $3\frac{1}{2}$ inch bore, $3\frac{1}{2}$ inch stroke. Speed 500 to 600 revolutions per minute (adjustable).



Sectional view through engine from fly wheel end, showing construction.

Vertical Type

The Farm Pump Engine is a vertical type engine, the same as used in the highest class of automobiles. There is no question about this being the **ONLY PRACTICAL CONSTRUCTION FOR AN AIR COOLED ENGINE**. Cylinders of the horizontal type can never be successfully air cooled even with the help of fans. The cylinder will always be much hotter on the top and bottom than on the sides. Uneven expansion from the heat makes the cylinder **OVAL** instead of **ROUND**. The rapidly moving piston soon wears it this way for

keeps, while the piston itself (expanding evenly) **STAYS ROUND**. The result is self evident. In a short time such an engine cannot **compress the explosive charge**. The mixture escapes past the piston. Then the engine is next to impossible to start, and has barely enough power to run itself, to say nothing of operating machinery besides. Air cooled engines of the horizontal type continue to be made for no other reason than because **the makers have never discovered how to properly oil a vertical air cooled engine**. And an engine without oil will go to pieces in no time.

WE BELIEVE WE ARE THE ONLY MANUFACTURERS WHO HAVE DISCOVERED HOW TO KEEP THE CYLINDERS AND PISTONS OF A VERTICAL AIR COOLED ENGINE PROPERLY OILED. See cut on page 23.

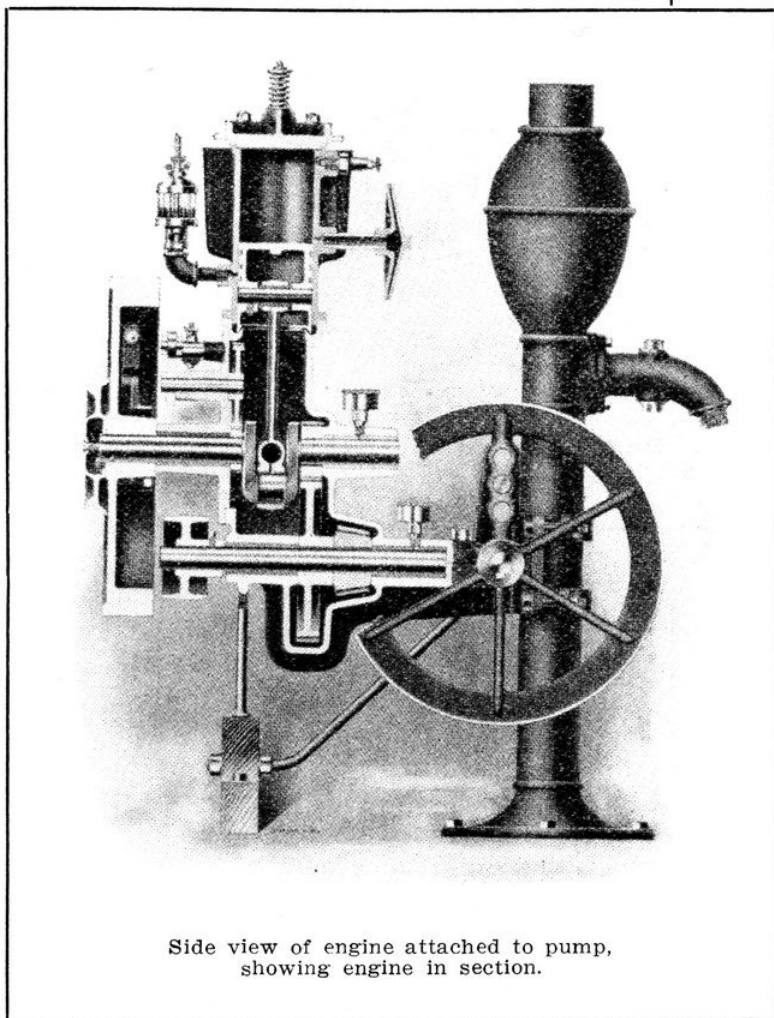
Simplicity

When design is correct, simplicity and freedom from complication in a gasoline engine mean long life, continuous running and hard service without trouble or bother of any kind. The Farm Pump Engine is the simplest engine ever put on the market. It can be entirely taken apart, using only **ONE WRENCH** in less than ten minutes and put back together in the same time. There is no possible way to put it to-

gether wrong. Any ten-year-old boy can understand it perfectly. This simplicity is what makes it possible for us to give such wonderful value in the Farm Pump Engine at a price any farmer can afford. Every one of these engines is made in the same careful, painstaking, workmanlike manner as the larger sizes of Fuller & Johnson Engines which have been known all over the United States for years as marvels of efficiency and durability.

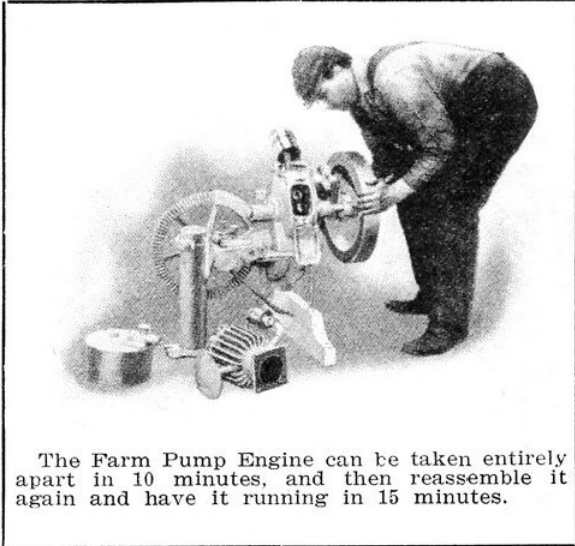
Cooling

For a correctly designed gasoline engine with cylinders less than 4 inches in diameter air cooling is not only practical but wonderfully



Side view of engine attached to pump, showing engine in section.

ECONOMICAL where the vertical type engine is used. Oiling, with other manufacturers, has been the great bugbear. Other makers have never discovered how to construct or **OIL** a vertical air cooled cylinder—which alone will **cool perfectly**. And, in consequence, have been compelled to make horizontal engines which they can oil, but which **invariably overheat** in warm weather. On the Farm Pump Engine we use **vertical fins**, which allow a current of air to pass upward freely on **all sides**. This keeps an even temperature **all around**. No part of the cylinder is hotter than any other part. The expansion is even. Therefore the bore is always a **perfect circle**—never **OVAL**. The Farm Pump Engine cools perfectly even when run all day with the thermometer 90° or more in the shade. No fan is needed. We have tested it under such conditions and **KNOW**.



The Farm Pump Engine can be taken entirely apart in 10 minutes, and then reassemble it again and have it running in 15 minutes.

Auxiliary Exhaust

When the piston reaches the lowest point on the power stroke, it uncovers a port which allows practically all the hot gases to escape, without having to be pushed back through the cylinder and out through the exhaust valve. So these very hot gases are kept away from the seat of the exhaust valve. The hand can be held within an inch of the exhaust opening in the head of the Farm Pump Engine without discomfort. In any other engine this would result in a bad burn.

Oiling

The oiling of a vertical oil cooled cylinder has proved such an insurmountable problem to other makers that they have practically discontinued their attempts to make this type—although it is a matter of general knowledge that an air cooled engine **must be vertical or it WON'T COOL PROPERLY**.

We do not hesitate to say that we spent hundreds of dollars and weeks of time before we solved this vital problem ourselves. The most important part is that we finally did **SOLVE IT PERFECTLY**.

The solution proved so simple that the only wonder is that “nobody thought of it before.” The sectional drawings shows how we solved it. Our system is not only perfection itself when the engine is running, but, when the engine is idle, capillary attraction carries a film of oil up alongside the piston, around the piston rings, and to the **very top of the piston**. It is perfection itself. A sight feed oiler keeps the oil trough filled at all times.

A compression cup at the bottom of the connecting rod, not only lubricates the main crank shaft bearing, but just the right amount is carried up through a small brass tube to the piston pin bearing, where the connecting rod attaches to the piston. The bearings on most engines receive insufficient lubrication, therefore soon wears and becomes loose, causing rattling and knocking when the engine is running.

All other bearings are oiled by grease cups. A quarter of a turn of these grease cups every time the engine is started keeps the bearings always perfectly lubricated, so that practically no wear can take place in the moving parts.

The Cylinder

This is made of fine, close-grained grey iron, the same as used for automobile cylinders, and which has proved so effective for years in our higher power engines.

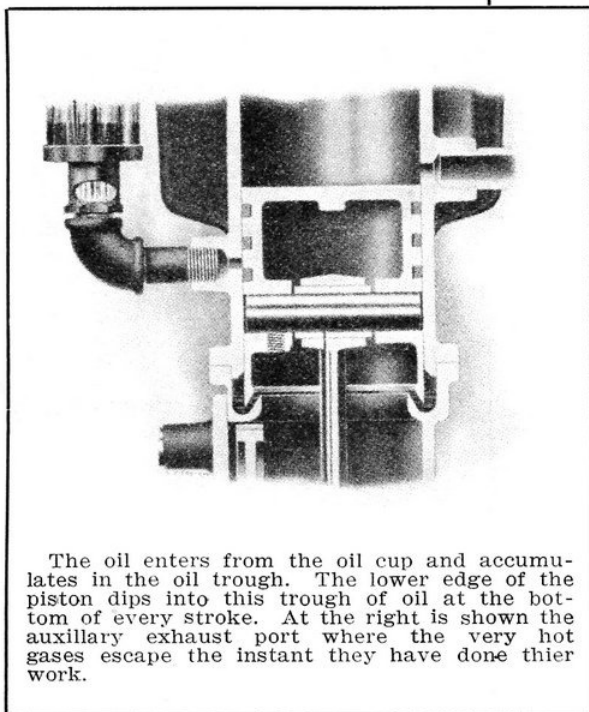
These cylinders are bored and finished on expensive machinery, and must be perfect in every part when completed or they are discarded. The cylinder head is machined to a perfect fit, and an indestructible copper-asbestos gasket forms a perfect air tight and gas tight joint. By loosening four nuts the cylinder head can be removed, giving free access to the valves should occasion require. **No gaskets or packing used in the Farm Pump Engine should ever require replacement.**

The Crank Shaft

This is drop forged from high grade steel to very nearly its finished form. The exceedingly strong and tough outer surface, which results from the compacting action of the forging hammer is not entirely removed. This construction, while expensive, insures a crank shaft of such exceeding strength that no strain it will ever receive can bend it, break it or spring it out of line.

The Connecting Rod

This is drop forged from the same high grade material used in the crank shaft. It is I-beam construction as shown, and several times as strong as it need be to properly and continuously do the work it is required to perform. Note the compression oiler for the main bearing and the tube which carries lubricant to the piston pin.



The oil enters from the oil cup and accumulates in the oil trough. The lower edge of the piston dips into this trough of oil at the bottom of every stroke. At the right is shown the auxiliary exhaust port where the very hot gases escape the instant they have done their work.

The Piston

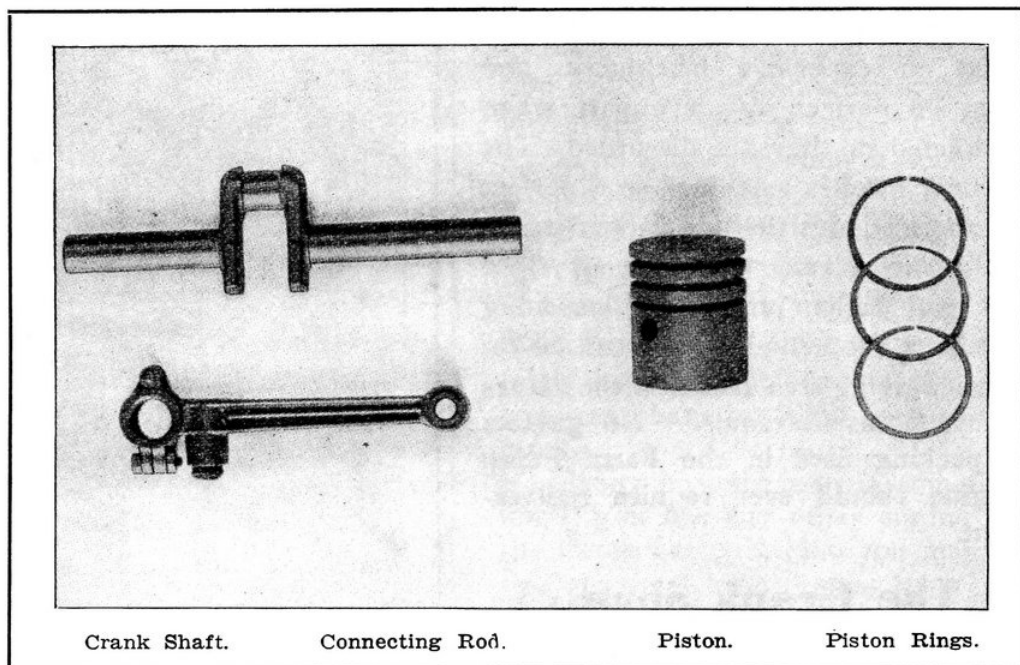
This is the same design as used in automobile construction, and is equipped with three piston rings, with overlapping ends, as shown.

The Fly Wheel

This is extra heavy, and is first turned to shape and then balanced with great nicety. The perfection of this balancing is shown in the almost entire lack of vibration in the Farm Pump Engine when running.

The Bearings

All bearings are extra large and long. The crank shaft bearings are $3\frac{1}{2}$ inches in length, which is larger than in many engines of 5 to 6 horse power. The bearings themselves (except pump rod bearings)



are compressed babbitt, the best and most enduring anti-friction metal known. All bearings are of such ample size that if kept lubricated they should wear for years without being touched.

The Gears

All the gears in the Farm Pump Engine (except the two operating the pump rod) are machine cut from tough, wear-resisting material. They mesh perfectly, and are extra wide, with large teeth, and run perfectly noiseless. They should show little if any wear after years of service. These gears are enclosed in the crankcase, away from dust and sand, and where they cannot catch the clothing or work injury to hands or limbs. The pump-rod gears are cast. These are protected with a shield, and are behind the pump and out of the way.

The Governor

The governor is on the inside of the flywheel, and is the same simple but wonderfully effective appliance as has been used with such success on our larger engines for many years. A lock nut permits an adjustment for speed between 500 and 600 revolutions per minute. It controls the flywheel speed so perfectly that it will not vary perceptibly, no matter how uneven the load may be. This governor also cuts off the gasoline and electricity when an explosion is not needed to keep up the speed of the engine. No current or fuel can be wasted.

The Ignition

We use dry cells, a high grade vibrating coil and a regular automobile spark plug. During late years this system has been so refined and perfected that nothing simpler or more effective for the purpose could be devised. Regular ignition batteries are used, and these can be replaced for a few cents each, should it become necessary to renew them.

The Mixer

This is the well-known Fuller & Johnson mixer, which for simplicity and efficiency has never been equalled. It is supplied with an automatic damper valve for shutting off the air when starting. This insures the rich mixture needed to start the engine at once, even in zero weather.

The Fuel Tank

This is constructed of thick sheet steel, heavily galvanized, and so constructed that there is no seam at the bottom where dirt can collect. The tank is made double with a half inch space all around, between the inner tank (which contains the gasoline) and the outer one. The air is carried clear around between the tanks before being mixed with the gasoline and drawn into the cylinder. We don't know of a simpler, **SAFER** or more effective fuel tank. It is absolutely free from danger from fire explosion, and is so made that it is impossible for rain, dirt or dust to get into the fuel and cause trouble.

The Pulleys

The Farm Pump Engine is supplied with pulleys to permit of the engine being used to run any machine intended to be **run by hand**. The first is supplied with all engines and is located just under the fly wheel on the gear shaft and makes 160 revolutions per minute. It is 4 inches in diameter by 2-inch face. The second is a round belt pulley, supplied when ordered, and is on the end of the fly wheel shaft. This pulley is 5 inches in diameter and runs at 500 to 600 revolutions per minute, according to the adjustment of the governor. It is intended to be used for light machinery **only**.

Pump Rod Arms

These are of straight grained hard maple, and are supplied with holes down their length to permit instant adjustment to all ordinary makes of pumps. A universal connection at the top goes on the plunger rod of any pump, and is solidly fastened in place by set nuts.

Range of Stroke

The pump rod driving arm is arranged for three adjustments of stroke—5 inches, 7½ inches and 10 inches. Change from one length of stroke to another can be made in from one to two minutes.

Capacity of Engine

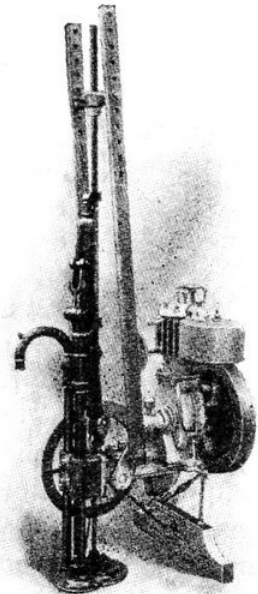
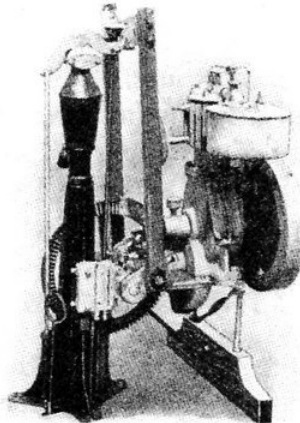
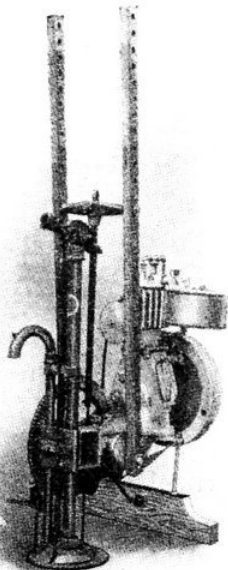
The Farm Pump Engine has plenty of power to work in any well which a windmill pump will handle. It will run continuously **any machine intended to be run by hand** without overheating or trouble.

Weight

The Farm Pump Engine because of the extremely high grade material used in its construction is very light for its wonderful power and strength. It weighs, (without battery box, ignition coil, tools, etc.) 240 lbs. Crated for shipment 330 lbs.

Equipment

With the engine goes a battery box containing five dry cells, a vibrator coil, switch, wire connections, pliers, wrenches and book of instructions. Also a supply of cylinder oil and cup grease, with oil can, funnel, etc.

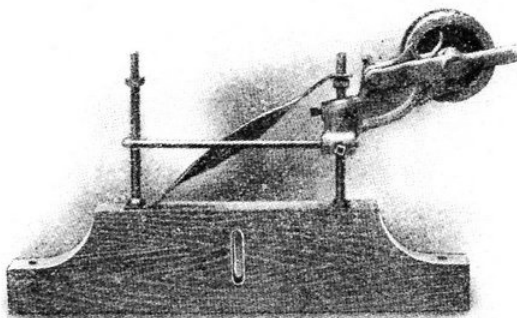


The Farm Pump Engine attaches to the ordinary pump standard without any extras whatever.

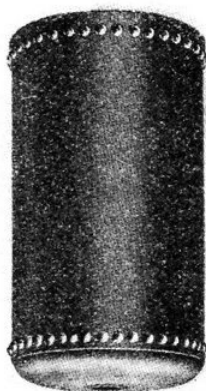
Fixtures for attaching to odd styles or special pump standards can be supplied at a reasonable additional cost.

Belt Tightener

When using the Farm Pump Engine to run the cream separator, or any other machine which starts slowly, and picks up speed gradually, some provision must be made to meet this condition, or the separator may be strained or the gear teeth broken. The belt tightener allows the belt to slip on the pulleys until it has picked up speed and is running as fast as the driving pulleys on the engine. It overcomes absolutely any possibility of injuring the separator when starting.



Air Chamber



When it is desired to throw a continuous and steady stream of water, an air chamber to act as a cushion is required to equalize the pressure. Most standard pumps have such an air chamber although in many of them this chamber is not of large enough capacity to give a continuous and steady stream. In such cases, or in cases where no air chamber is provided, an air chamber can be applied by connecting on a piece of pipe to stand above, or to connect on a tank, such as is shown in the margin, and which we are able to supply, and which in the case of an open well can readily be attached to the pipe below the platform, or with many pump standards, can be put to one side on a shelf or post and connected to the standard and in this manner secure at a minimum cost an excellent air chamber that will give an excellent "head" and a steady stream of water.

General Work Standard

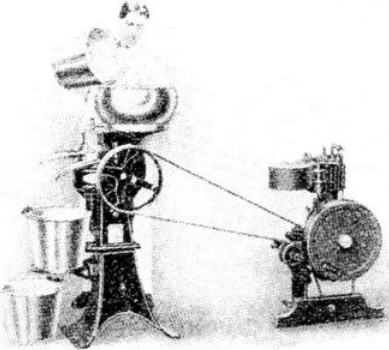
Where it is desired to use the Farm Pump Engine independent of or away from the pump standard, a neat method of providing a stand is to use a short piece of pipe threaded into a floor plate or foot piece to which the engine can be clamped, the same exactly as if to a pump standard. We can supply such a standard when desired, similar to that shown in the margin, 3-inch pipe being used. We particularly recommend this to our dealers having Farm Pump Engines in their exhibit room as it is a particularly convenient method of setting them up for show room purposes as well as convenient and desirable for many users.



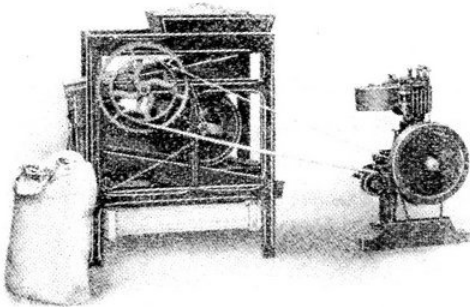
Uses and General Information

Uses for the Farm Pump Engine

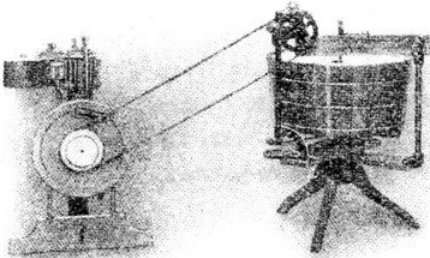
Pumping in Wells up to
600 feet deep



Running Cream Separator



The Fanning Mill



The Washing Machine



The Clipping Machine

What the Farm Pump Engine will do for Ordinary Pumping Service

THE FARM PUMP ENGINE will pump any ordinary well for as many hours per day as desired, at 35 strokes per minute, and on the ten inch stroke, as follows:

Depth to water or actual lift of water	Diameter of pump Cylinder	Water pumped or delivered per hour
600 feet	2 inch	280 gallons
525 "	2¼ "	360 "
450 "	2½ "	440 "
300 "	3 "	640 "
225 "	3½ "	870 "
175 "	4 "	1140 "

By using one of the shorter strokes you can pump a deeper well, or raise the water a greater distance, with a given size cylinder, than that in the table above, but as you shorten the stroke it decreases the amount of water delivered per hour.

Consider, only, the distance the water is to be raised or lifted. The depth of the well is not material.

Example: You have a well 200 ft. deep in which the water level is 150 ft. down. Your pump cylinder is 3 inches diameter. You want to deliver water to the top of a nearby hill 150 ft. above your pump. (Go as far sideways as you like as that requires little or no extra power.) You want to raise or lift your water a total of 300 feet. The Farm Pump Engine will do it.

For Irrigating or Short Lift Pumping

The Farm Pump Engine is adapted to raising large volumes of water for a reasonably short distance, such for instance, as

from 4,000 to 6,000 gallons per hour on a 20 ft. lift, depending somewhat on the type of pump used, or a proportionately less quantity on a greater lift.

State your conditions to us and we will tell you what it will do.

Send for Special Irrigation Bulletin.

Country Home Water Supply

The water supply for many country homes, suburban or summer residences, is dependent on the windmill, and few have failed to have the experience of a period when there was no wind and the whole water system inoperative, causing very great inconvenience and annoyance.

The windmill without the wind is absolutely useless, and no effort or expense on your part can provide it. The Farm Pump Engine is entirely independent of the wind but requires a small amount of gasoline, and the gasoline can be purchased for a few cents at any cross-road store.

If you have a pressure water system in your house, similar to any of the well-known water supply systems, the engine can be attached direct to the pump and will give you any required pressure.

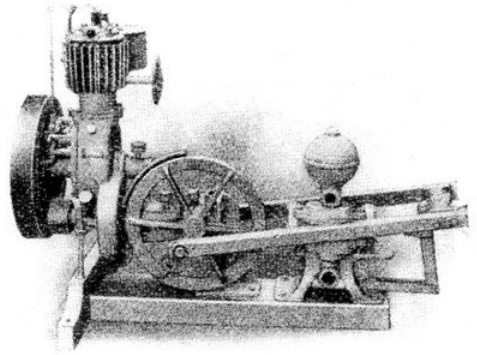
One of the cuts in the margin shows the engine attached to one of the well-known "water supply" pumps as it was installed in a suburban home near Chicago.

Send for Special Bulletin.

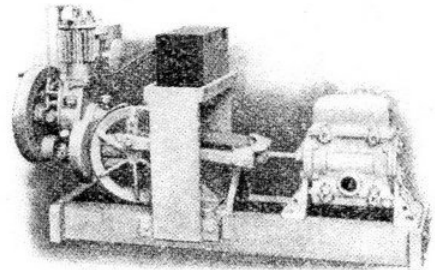
Ditch Pump

The Farm Pump Engine can be readily attached to any contractor's diaphragm or bilge pump such as is ordinarily operated by one, two or three men, and will save the contractor from \$3.00 to \$5.00 every day of the week.

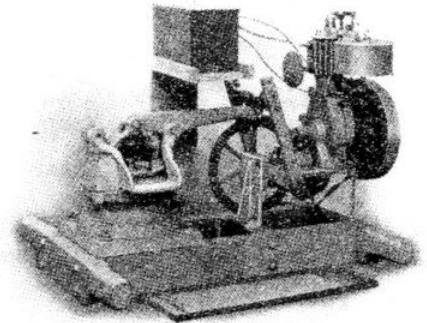
This Farm Pump Engine outfit—a small cut of which is shown in the margin—is compact and convenient, and will run all day and all night. Does not stop to light



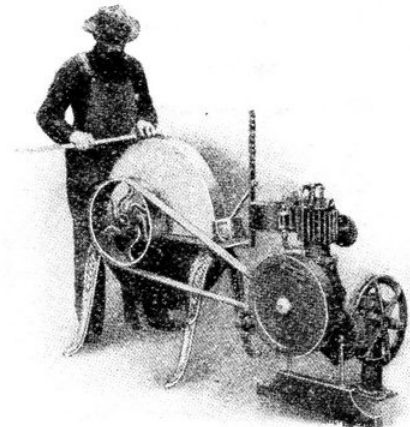
The Pressure System
[With Kewanee Pump]



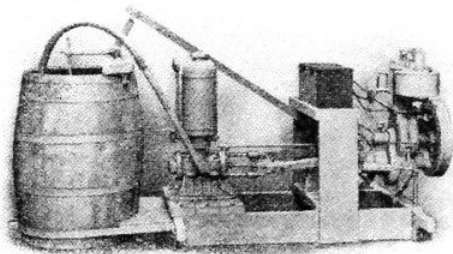
The Suction Pump



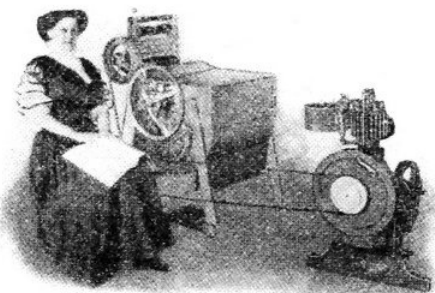
The Diaphragm Pump



The Grindstone



The Spraying Machine



The Washing Machine

The Wringer

The Mangle

The Churn

The Corn Sheller

The Small Feed Grinder

The Small Fodder Cutter

The Farm Grain Elevator

The 13 Light Electric Dynamo

The Green Bone Cutter

The Sheep Shearing Machine

The Milking Machine

The Ice Cream Freezer

The Small Cement Mixer

The Drag Saw

Washing Wagons

Washing Windows

Washing Milk Cans

Washing Milk Bottles

For Irrigation

For Watering Lawn

As a FIRE ENGINE

**Or for Running any Machine
which is Intended to be run
by Hand.**

its pipe; does not take an hour or so off for dinner. Give it gasoline and oil and it will stay on the job all night.

Ten or 15 cents in gasoline and oil will easily take the place of two men and do the work better than any man you can hire.

Send for Special Bulletin.

Spraying

In all sections of the country with orchards or where small fruits such as grapes, currants, berries, etc., are grown, the matter of spraying and spraying outfits is an important one and recognized as a necessity; in fact, the same is true of most crops confined to small acreage, such as potatoes, cabbages, celery, etc., in order to secure the best results from the crop.

While spraying is necessary, it of course only requires a few days through each season to do all the spraying required, and therefore a heavy investment in a complete outfit adaptable for spraying only is to be avoided if possible, and this can be done by purchasing a Farm Pump Engine outfit.

Practically every grower also has need of a pumping engine; therefore in buying our outfit you buy an engine that is of service to you every day in the year, and the small additional cost for the pump and spraying tools is all the real investment you have in the spraying apparatus.

Or, if you have a Farm Pump Engine we can supply you our spraying outfit to which engine will readily attach.

Or, if you have a spraying outfit our engine can readily be adapted to operate it.

Our spraying outfit can be set into a wagon box or on a truck, and is powerful enough to run from six to twelve ordinary spray nozzles and keep a pressure of 140 lbs., which is ample for all ordinary needs.

Send for our Special Spray Bulletin.

High Power Gasoline Engines



THE Farm Pump Engine, desirable and efficient, is naturally restricted to the lighter work to be done about the farm. It does the irksome chores willingly and in a hurry.

The really heavy work of the modern farm requires a gasoline engine of from 3 to 8 horse power. And if an extra large, general purpose engine, 10 to 16 horse power, stationary or portable, will be found still more effective and economical.

The building of these high power gasoline engines has for years been our specialty. It was on these and our modern labor saving farm implements that the Fuller & Johnson reputation has been built up.

We are pioneers in the Gasoline Engine business. Engines built by us years ago are still in use and giving perfect service. For simplicity, power and extreme durability, no matter how severe the conditions of work, they are supreme. No other engines can equal them no matter what claims may be made to the contrary. The testimony of those who have tried many other engines to finally settle on the Fuller & Johnson, is sufficient evidence of the truth of this rather broad statement.

We earnestly solicit comparisons and comparative tests. They invariably result in a sale for us. In cases without number it has been found that a Fuller & Johnson 4 horse power engine, for example, was far more powerful than a so-called 6 horse power of some other make. Other sizes in the same ratio.

WE WERE THE PIONEERS IN DEVELOPING THE OPEN JACKET TYPE OF ENGINE WHICH HAS REVOLUTIONIZED THE GASOLINE ENGINE INDUSTRY.

There are many other Fuller & Johnson ideas, just as important, in these high power engines. They mean a great deal to you. They are quite as vital from the standpoint of durability and efficiency, and in keeping trouble down to the minimum, as the "open jacket" is from the standpoint of cooling in winter weather.

If you are interested in a more powerful engine than the Farm Pump Engine, send for our regular Gasoline Engine Catalogue, and study it carefully.

You will do yourself an injustice if you buy any kind of a gasoline engine before you have done this.

Labor Saving Farm Implements



THE Fuller & Johnson Manufacturing Company's agricultural implements are designed with **special reference** to the farmers' actual needs and their points of excellence are the result of thirty years of manufacturing experience and a careful study of soil and crop conditions under which they must work.

Every single article of this line has been carefully and conscientiously worked out and O. K.'d by skilful, practical and experienced mechanics in the designing and experimental departments, and is backed by the unqualified endorsement of thousands of progressive, practical and successful farmers.

It is because the Fuller & Johnson implements meet **actual requirements** that they are indeed time and labor savers.

An implement that is incorrectly designed cannot be made to work right and is therefore a constant source of annoyance and expense not only in time wasted but in loss of proper crop returns, because of improper or imperfect soil cultivation.

Three vital points in the manufacture of an agricultural implement that it may be an actual time and labor saver are absolutely essential—**SIMPLICITY OF DESIGN, STRENGTH** and **ADAPTABILITY**. Simplicity and strength mean beyond question long life for the implement, and absence of complicated mechanism means satisfaction in its operation. In the accomplishment of these ends it is **absolutely necessary** to use materials of the best and highest quality and secure the best workmen obtainable. Adaptability means perfect working qualities, hence better crops and better prices which, coupled with time, labor and ultimate expense saved, by reason of buying only the best, even though the first cost may be slightly more, insures economic results of incalculable value.

If interested in strictly reliable, broadly guaranteed, time and labor saving implements such as Walking or Riding Plows, Gang Plows, Disc Harrows, Walking and Riding Cultivators, Corn Planters or Transplanters, it will certainly pay you to investigate those of the Fuller & Johnson Mfg. Co.

For simplicity, durability, reliability, economy and efficiency, the Fuller & Johnson line of farm implements and gasoline engines are positively unequaled. Write for our illustrated catalog, which will be mailed on application.