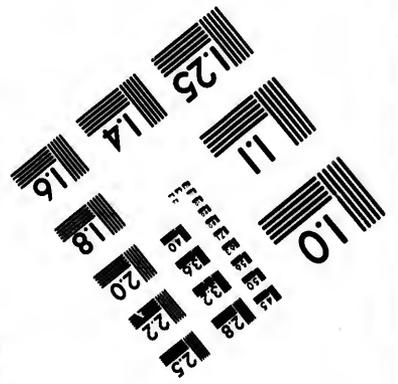
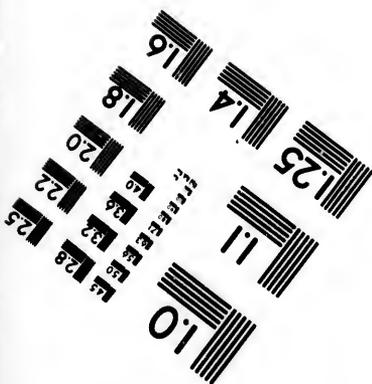
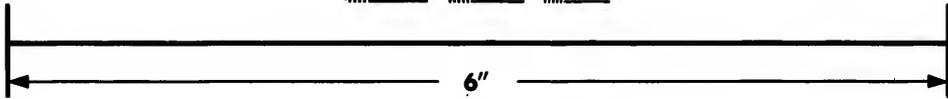
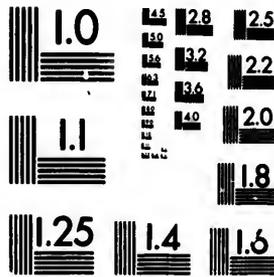


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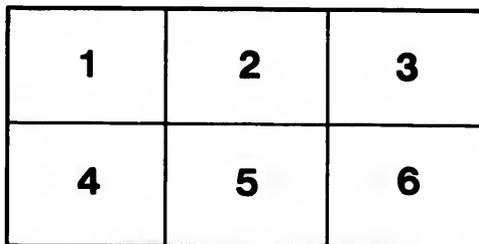
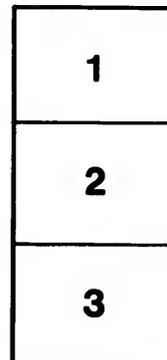
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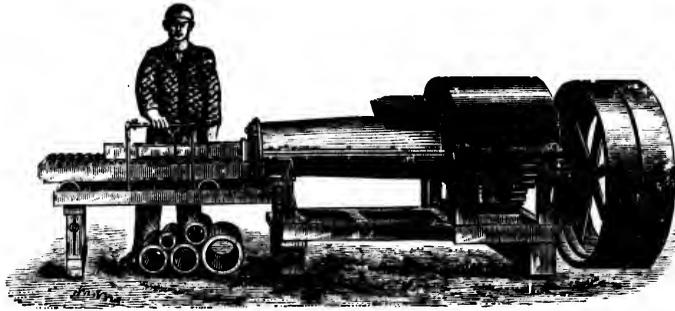
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CATALOGUE FOR 1889.



The Kells Improved Combined

BRICK AND TILE MACHINE.

(Patented February 23rd, 1885.)

H. C. Baird & Son,

Manufacturers of a full line of Brick and Tile
Machinery,

PARKHILL, ONTARIO.

INTRODUCTION.



To the Brick and Tile Manufacturers of the Dominion of Canada.

GENTLEMEN :—We take great pleasure in presenting to our friends and customers our New Illustrated Catalogue of Brick and Tile Machinery. Since commencing the manufacture of Kells' Patented Combined Brick and Tile Machine, in 1884, which has been a source of great satisfaction to ourselves as well as to our many customers, being unequalled by any Auger Machine in the market for quality and quantity of work on either Brick or Tile, and at the same time being the Cheapest, Simplest, Strongest and Most Durable Machine in the market, to which a great many of our customers can testify, who have discarded both other auger and plunger machines and are now using the Kells' patented. Notwithstanding this, we have from time to time been asked for a horse-power press or mould brick machine, and now we have concluded, after spending considerable time and money investigating the many different patterns at present manufactured in Canada and the United States, that the "New Quaker," (of which a full description and many flattering testimonials in its favor will be presented in this pamphlet,) fills all the requirements of this class of machine, and at the same time does it with less than one-half of the complicated machinery. This alone should be sufficient to commend it to any intending purchaser of a mould brick machine—say nothing about its being from 15 to 25 per cent. cheaper than other machines of the same class. We ask for a careful perusal of the contents of this pamphlet and trust it will be both profitable and interesting to all parties interested in the Brick and Tile business. We again take this opportunity of thanking our many customers for their liberal patronage in the past, and hoping to receive a continuance of the same,

We are yours respectfully,

H. C. BAIRD & SON.

WILL YOU DO US A FAVOR? If this circular is not interesting to you will you do us the kindness so hand it to some builder or to a brick or tile manufacturer, who, you think, would like to examine it.



“ The Proof of the Pudding is in the Eating.”

It certainly will be accepted as equally true that the most reliable testimony regarding the value of a machine must come from those who have used it, and are in position to speak from *actual results*. This is the kind of testimony we present, and we believe it will be found to be very much more pertinent and satisfactory, from a *business* standpoint, than any amount of theory or unsubstantial claims.

The letters are, many of them, from the most prominent firms in their locality; and they come from all sections, and all capacities of yards from 500,000 to 10,000,000 bricks per year, both of which circumstances show their *wide adaptability to all kinds of materials and circumstances*.

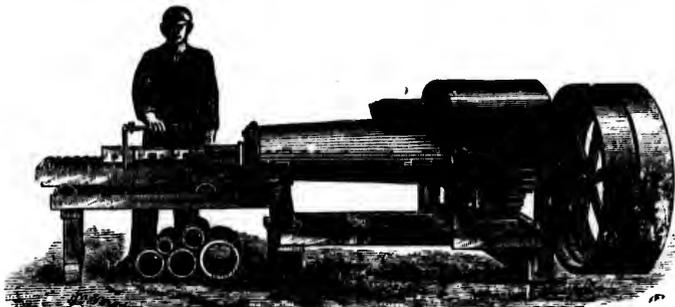
A careful examination of these letters is asked, and we are confident that they will prove interesting and profitable.

EVERY TESTIMONIAL WE GIVE IS GENUINE, AND WRITTEN BY OUR CUSTOMERS, AND NOT PREPARED BY US FOR THEM TO SIGN. WRITE TO THEM WITH STAMP FOR REPLY.



A FEW POINTERS

— ON OUR —



Improved Pat'd Brick and Tile Machine.

THE MACHINE has the following advantages over all other brick and tile machines :

- (1) In its great simplicity in design, which is plainly shown in the cut.
- (2) The clay is taken from the bank in its crude state, therefore avoiding the expense of digging and throwing it up in banks to freeze. We do not claim to work all kinds of clay this way, as it is a well-known fact with all brick and tile makers that no machine will work all clays direct from the bank, but we do claim to work any clay that is fit to make either brick or tile by merely tempering from ten to twenty-four hours previous to going through the machine. This is from the fact that all clays will not take water immediately, and must be allowed a sufficient time to soak.
- (3) It makes a finer and stronger brick than those made by hand, or on any press-brick machine.
- (4) The brick are taken from the machine and haked from five to nine high.
- (5) With from two to three less hands than is required to run a press-brick machine, turning out from ten to twelve thousand bricks per day of ten hours, there can be made on this machine from fifteen to eighteen thousand, from the fact that there are no moulds to sand, no pallets to handle; nothing is needed but the crude clay itself, and consequently the bricks will, when burned, be in their natural color.
- (6) The machine has been fully tested for its good work, its strength and durability. It is constructed of iron and cast steel, and is adapted to either brick or tile. It makes tile from 2½ up to 10 inches, interior diameter, and will turn out all sizes of tile indicated as rapidly as they can be handled. What we claim to be a fair day's work on tile, is: 2½-inch, from eight to nine thousand; 3-inch, eight thousand; 4-inch, from six to seven thousand; 5-inch, six thousand; 6-inch, from four to five thousand; 7-inch, three thousand; 8-inch, from two thousand to twenty-five hundred; 10-inch, from fifteen to twenty hundred. Not-

withstanding a great many of our customers claim to nearly double this, we call it a fair day's work, and will guarantee to make the above numbers in any yard where the clay is fit to make tile.

The number of men required to turn out fifteen thousand brick per day of ten hours is: two men to dig and cart the clay to the machine, one man to feed, one boy to cut-off, one boy to put the bricks on the barrow, two men to wheel and set the bricks in the hooks, and one engineer, making in all, six men and two boys. The machine may be run up to thirty thousand by adding sufficient power and men to handle the brick. The machine has tight and loose pulleys, 48 inches in diameter, with 8-inch face; speed, from eighty to one hundred revolutions per minute. Every joint about the machine is either planed or turned, so that there is no spring or strain on the castings in bolting them together, so that any part of the machine can be duplicated without having to procure the services of a skilled mechanic to put it together.

Our brick dies are all planed and polished inside so that the brick come out with a perfect gloss. Our tile rings are all turned on the face, as well as the face of the machine, so that when bolted together they must come perfectly true. We supply a centering bell with

STRATFORD, Feb. 15, 1889.

H. C. Baird & Son, Parkhill, Ont.:

Gentlemen: The Kells' Improved Patented Brick Machine which I bought of you two years ago has given me entire satisfaction. To make a long story short, I will say, that the machine will do all you claim for it. My brick have no preference by 60 cents per thousand over all other brick that are made here. I can certainly make brick cheaper than those who use other machines. I would cheerfully recommend it to any one contemplating the purchase of a Brick and Tile Machine. To those using the machine good words for it seems quite unnecessary. It speaks for itself.

Yours truly,
(Kells' Machine.) A. J. CLARK.

BURDGETOWN, Feb. 13, 1887.

Messrs. H. C. Baird & Son:

Dear Sirs: As a brick and tilemaker I have had sixteen years' experience in the business, and have bought seven different styles of brick and tile machines, which have cost me thousands of dollars for machines, repairs, and loss of time. Now, I have been using your machine for the last two years, and can truthfully say that it is the best one I ever purchased. It has not caused an hour's loss of time during the two years. I can make twice the amount of brick or tile with your machine that I could with any other, with less power and a great deal less cost for labor and no loss in burning. I can make all the brick or tile I wish to, as I can run four hands or fourteen hands, so that is a great advantage over other machines. I cheerfully recommend your machine to the brick and tilemakers. See one of Baird's machines and be convinced. Buy one, as it will pay for itself in one year over any other machine.

(Kells'.) Yours truly, J. KITCHEL.

NORWICH, Feb. 21, 1889.

H. C. Baird & Son, Parkhill, Ont.:

Gentlemen: We have had one of your Machines (Kells' Patent) in operation for the past two years, and in our estimation it has no equal for that class of machine, as the brick turned out in our yard compare favorably with any pressed bricks.

Yours truly,
IRWIN & VANVALKENBURGH.

WILKESVILLE, Feb. 14, 1889.

H. C. Baird & Son, Parkhill, Ont.:

Dear Sirs: I am highly pleased with the tile and brick machine which I purchased of you. I feel satisfied that it is the best Auger Brick and Tile Machine manufactured in Canada, and when properly handled makes brick and tile very fast.

Yours truly,
(Kells' Machine.) CHARLES B. JAMES.

KEYSER, Feb. 26, 1889.

H. C. Baird & Son, Parkhill, Ont.:

Dear Sir: It is a pleasure to me to recommend the Tile and Brick Machine you manufacture to my party wishing the same. I am an experienced brickmaker, having been sixteen years in the business. The machine can make as many perfect bricks or tiles as can be handled. We can run fifty-six bricks in one minute and tiles as fast as any man can pick them up. We run with a threshing machine engine. You can use my name as much as you like regarding the machine.

Yours truly,
(Kells' Machine.) JOSEPH KEYSER.

WHITBY, Aug. 26, 1886.

H. C. Baird & Son, Parkhill, Ont.:

Dear Sir,—The Brick and Tile Machine which I purchased from you last spring has given entire satisfaction. Nothing could work nicer. The productions of this famous machine have the advantage of being perfectly smooth and glossy, and tile of its moulding have no obstructions on the inside to arrest sediment and cause the tile to fill up, a fault attributed to all hand machines. The tile when burnt are not liable to be spoiled on account of limestone, as the stones while passing through the die are pressed near the surface and only take a chip out. I had thousands of lost tiles last year where I have hundreds this season. With three men and three boys I can make \$14.00 worth of tiles per ten hours. Cost per thousand when burnt and wheeled out, \$1.70; with my hand machine it cost me \$3.00 per thousand. The farmers through this district are highly pleased with the tiles and the masons claim the brick are equal to repress brick. I can make as many bricks per day as I can with my Martin machine in two days, with less cost. I take pleasure in recommending your machine, and you are at liberty to refer any parties to me who contemplate purchasing a machine.

Yours respectfully,
(Kells' Machine.) WILLIAM KIRKLAND,
Brick and Tile Maker.

each machine for centering tile rings, so that the tile will be the same thickness all around. This saves a lot of time as well as trouble and annoyance. Great care is exercised in packing the dies and cut-off tables to avoid breakage in shipping. Full and complete instructions go with each machine, to assist in its setting up and running. When the machine fails to do as we recommend it, we will send a competent man to set it right; and if it be the fault of the machine that it does not work properly, no charge will be made; but if in the fault of the handling of the machine, then we will expect the purchaser to pay mileage both ways.

It is a fault, attributed to all auger machines, that the brick are more or less liable to check in drying. We have only encountered this difficulty in very strong clay, so we have experimented on it to a very great extent, and are satisfied that we have overcome the difficulty. We have tested our invention in the very strongest of clay, by exposing the brick to the air immediately on coming from the machine, and they have dried perfect, without showing the least sign of a check.

With regard to power, the machine requires from 12 to 14 h. p. As most of the machines are run by threshing engines, we might just say that all the change necessary on the

NONWICH, Ont., Feb. 15, 1880.

Messrs. H. C. Baird & Son:

Dear Sirs: Yours of the 12th inst. at hand. In reply would say, that it gives us great pleasure to give testimony to the merits of your machine. It gives us perfect satisfaction in every respect—both in regard to quantity and quality of the work it performs. In fact, the more we work it the better we like it.

You may make what use you see fit of this, and if anyone doubts it we invite them to inspect our brick and tile.

Yours respectfully,

GEORGE DELLER.

MIDDLEMISS, Feb. 22, 1880.

Messrs. H. C. Baird & Son, Parkhill, Ont.:

Dear Sirs: In reply to your enquiry, would say, that after using your Brick and Tile Machine nearly a year and a half, without a cent of expense for repairs, I believe it is the best on the market by having the clay drawn up and put into a vat by the machine. We run out 6,000 perfect brick in three hours and thirty minutes, with only four men. We make from 12,000 to 25,000 per day of ten hours, with four men at the machine. It cannot be beat for tile. We had two other machines before purchasing one of yours, and nearly every week they would break down, costing us a considerable amount for repairs beside the loss of three or four days' time.

I take pleasure in recommending this machine to all intending to purchase.

Yours respectfully,

F. W. IRISH.

VANCOUVER, B. C., Feb. 26, 1880.

Messrs. H. C. Baird & Son, Parkhill, Ont.:

Dear Sirs: We have had one of your Kells' Brick Machines in use for two seasons, and it gives entire satisfaction, turning out from 20,000 to 25,000 per day of ten hours with the two steam die, and we are certain we could make 30,000 per day if we had yard room for them. The cost for repairs has been very slight, and a man who never saw the machine can easily run it. We use mostly Chinamen around it, and have had no trouble at all.

Our brick were all sold before the 1st of January, while other yards here have brick on hand yet, so I think the public like the brick made by your machine, and we find they can be made much cheaper than by any other machine in use in this country. We are,

Yours very truly,

D. A. McFARLAND & CO.

PLATTSVILLE, Ont., Feb. 13, 1880.

Messrs. H. C. Baird & Son, Parkhill, Ont.:

Dear Sirs: I take great pleasure in saying that the brick and Tile machine purchased from you is giving the best of satisfaction. It can turn out 15,000 brick in ten hours, easily, taking the clay from the bank. Can easily make from fifteen to sixteen thousand 2½-inch tile in the same time, and, in fact, more if the men could take them away from the machine, taking clay right from the bank. I can also say the tile are first-class, being straight and round.

Yours truly,

J. B. STECKLE.

BRIDGEN, June 10th, 1886.

H. C. Baird, Esq., Parkhill, Ont.

Dear Sir,—Yours to hand. In regard to Machine I will say it is the best made in the Dominion. As I have been harrassed with machines for the last twenty years. I went to great trouble in getting all the information about all the machines, both in this country and in the United States, which I could not see work myself, and in seeing yours work, decided to give it a trial. And in doing so I am greatly pleased with it in different points. First—in its great simplicity in make, run by 4 ft pulley only, and one small and one large cog-wheel; nothing to get out of order. Second—The great speed with which it turns out brick. Third—The quality of brick, fine face, and perfect square and all alike. I make the side-cut, from 16,000 to 18,000 per 10 hours, and I know we can make 30,000 in the same time, by putting on extra hands. And for tile I never saw its equal; every tile a polish finish, inside and outside. We made 1,000 of 8 inch in 3½ hours after they were ordered. I have run on other machines a whole day to make 800 of the same size, and used more power to do it, using 1½ cords of wood; and with the same engine and boiler only burning ½ cord to make 1,000 of 8 inch with the machine I purchased from you. I can recommend going in Michigan of 2,000,000 of brick being made with two auger mills in six months. Now, with fair weather, if I cannot make the same number in five months with the one mill I got from you, I will give it for nothing. And again compare the cost. My machinery cost me, before putting in your machine, \$300; one \$500, the other \$400. Yours at \$425, turning out double the brick and tile makes it a very cheap machine, and I highly recommend all parties wanting machines to see it work before buying elsewhere, even if they go hundreds of miles to see it, they will never regret it, if

H. HALEES,

(Kells') Box 56, Bridgen, Co. Lambton, Ont.

engine is to put a small pulley on a 12 h. p. engine. A 20 or 22-inch pulley is required, with a 16-inch face, in order to run the belt off on the loose pulley; or a pulley with an 8-inch face may be used by stopping and starting the engine when required. On a 14 h. p. engine it will require from 22 to 24-inch pulley. This will allow the engine to be run up to its proper speed, and at the same time will drive the Machine at its proper speed.

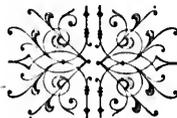
We have made arrangements with some of the most reliable builders of threshing engines to handle our machine, and who have constantly on hand a large assortment of second-hand threshing engines, which are, for all practical purposes, as good as new, and are sold at very low figures.

We will be pleased to furnish any information in this respect that we can.

Price, on application to any of our agents, or direct to us.

H. C. BAIRD & SON.

AND CORRESPONDENCE SOLICITED.





SPECIAL FEATURES

— OF THE —

“NEW QUAKER”

→ BRICK MACHINE ←



THE Machine was named, as its name indicates, on account of its simplicity. This is the most important point of all and must not be forgotten. There is nothing complicated or unreliable about it. Every movement is positive and true, and there is no necessity for weights, balls and elms, sliding scales, trip-levers, patent catches, etc., etc., while every other machine we know of has something of the kind that they claim comes into operation all by itself when they want it to, to obviate some vital fault of their machine. **SIMPLICITY AND RELIABILITY ARE THE MOST IMPORTANT POINTS TO BE TAKEN INTO CONSIDERATION.**

FILLING THE PRESS BOX. — When a press box of a brick machine is placed OUTSIDE of the pug-mill (as is the case with all but one, we believe, of the “tempered clay” machines in the market), the press box is filled by a wiper on the main shaft, which revolves in a circle, and consequently does not fill the press box evenly with mud, but puts more into the centre of the press box than at the ends, and, therefore, when the mould is filled the end brick will be slighted. But in the “New Quaker” the clay FALLS VERTICALLY INTO THE PRESS BOX through an opening in the front side of the floor in the upright pug-mill of the machine ten inches wide and as long as the machine is wide, FILLING ALL PARTS OF IT EQUALLY, which CAN NOT BE DONE IN THE OTHER MACHINES.

THE PRESSURE IS APPLIED HORIZONTALLY instead of vertically, the back of the press box moving forward, driving the clay against an inclined wall at the front of the machine, by which it is directed downward into the moulds directly underneath. We are enabled by this method to PRESS THE END BRICK

AS MUCH AND NO MORE than the centre ones, and fill out all the corners square and solid, also making them all of uniform density, and so when burned they will all shrink alike, which all brickmakers and bricklayers will appreciate.

REGULATING THE PRESSURE. — The amount of pressure upon the clay can be CHANGED INSTANTLY while running, without stopping, from none at all to a great deal, to correspond with the consistency of the clay, by simply drawing out or pushing in the regulator rod, which can be seen in the cut, projecting from the side of the machine.

ARRANGEMENT FOR LETTING OUT STONE, Etc. — By applying the pressure horizontally we are enabled to use the trap-doors shown in front of the machines, which are held in place by strong steel springs, and so adjusted that if a stone or other obstruction presents itself in any single mould, that door flies up and allows it to pass out, leaving the remaining five bricks in the mould perfect; or, if the obstruction is too large to go into the mould, it will lift two or more of the doors and come out. Whole burned bricks have passed through the machine and out these doors without doing any damage.

They require no attention whatever, and the BREAKING OF THE MACHINE OR A MOULD BY A STONE IS SCARCELY POSSIBLE, and no other machine made has any arrangement that will begin to compare with this in simplicity and efficiency.

MANNER OF FILLING MOULDS. — One of the greatest difficulties in all machines has been the trouble of getting the bricks out of the moulds after being filled. This has been most perfectly overcome in the "New Quaker" Machine by the peculiar construction of the die. The fingers of the die set squarely over the partitions of the mould, the space through which the mud passes being $1\frac{1}{2}$ inches

WELLSVILLE, Mo., Oct. 29, 1888.

Dear Sirs: The "New Quaker" Brick Machine that I got last spring is unsurpassed. I would accept none other in its place for good work. Any one wishing to see it work can do so by calling most any morning. We get our day's work out about 12 o'clock. I cannot speak too highly of the machine, and I recommend it to all.

Respectfully,

WM. N. LEWIS.

LAREDO, TEXAS, Oct. 30, 1888.

Gentlemen: The "New Quaker" Horse-power machine I purchased of you July last is a first-class machine in every respect, and while I have no reason to complain of the Old Quaker, as I run it four years without breakage, still I see the new style is far superior, both in strength, simplicity, and quality of brick it produces. It seems to press a great deal harder than the Old Quaker; it can mould the mud stiffer than could absolutely be moulded by hand, and never fails to fill out any corners. I put it up and started it just as I received it, without fixing or adjusting anything. The first mould of brick was good, and it has worked as smooth as a sewing machine without a minute stopping to fix anything up till to-day. I shall cheerfully recommend your machine to anyone that may wish to purchase a machine, as a first-class one, as I know of no better, though I have operated a great many. I am well pleased, and in every way satisfied with the machine. No man can misrecommend the machine and tell the truth.

Yours respectfully,

A. THAISSON.

ALAMOSA, COL., Oct. 28 1887.

Dear Sirs: I am very well pleased with your "New Quaker" Machine. If I had not ordered and received the same from you, I would have lost a \$10,000 contract which I had in hand at the time I ordered. I have made nearly 400,000 brick with it this summer, and it was late when I ordered. It was not shipped until July 16th. I averaged 15,000 per day.

Respectfully,

WM. C. BROWN.

COLUMBIA MO., Oct. 29, 1888.

Dear Sirs: Am well pleased with the "New Quaker" Machine, and find it far superior to the old one. I thought the old one the best soft mud machine that I ever saw, but the "New Quaker" has more pressure and makes it easier on the horses. I will never have anything but praise for your machine. Have used it for four years. Hoping you will have big sales, I remain

Yours, etc.,

J. D. FAY.

NEW ORLEANS, LA., Nov. 15, 1888.

Gentlemen: We have been using the "Quaker" Brick machine upon our yards since 1885, and after this thorough test we can truly say that, for our purpose, it is undoubtedly the best machine in the market. Our machine has been in constant use nearly the whole year around, and our clay is a very difficult one to manipulate, yet this machine has stood the test very admirably.

Respectfully,

A. S. BLAFFER,

Sec'y J. A. Blaffer Brick and Lumber Co.

narrower than the brick itself; the mud is forced first to the bottom of the moulds and then spreads out to the sides and corners. By this means no sand is wiped off from the sides of the moulds in the downward passage of the clay, and thus the bricks slip freely when dumped.

OTHER POINTS.—The machine is so constructed that IF THE MOULD IS INCORRECTLY OR PARTIALLY ENTERED IT CAN NOT BE BROKEN; it will do no harm whatever. No other machine is reliable in this respect.

Should the operator at any time wish to stop delivering bricks he can draw out the regulator rod, and the bricks will stop coming out, allowing the horses or steam-power to run right along and do no damage, having no other effect than to temper the clay more thoroughly.

The filled mould is forced out before the pressure is released, thus keeping the clay in the mould. After the mould is out THE MOULD-PUSHER RETURNS BACK WITH A QUICK MOTION, allowing the sander PLENTY OF TIME to insert a mould.

As the moulds come from the machine ready for the truck they are struck off by a man with a knife which we furnish for the purpose.

Bumpers are attached to the machines, which are especially useful in a very

MARYSVILLE, O., Oct. 23, 1888.

Gentlemen: The Brick Machine I got of you is perfect in every respect. It will make as many brick as one man will dump out of the moulds. The horses can go on a trot or slow, but it does its work just the same. The old way of claying mud with the hands and throwing it into a mould, one at a time, is the hardest kind of work, and expensive, and will get a way with any man in time, as I found by experience.

A friend who bought 65,000 brick of me, said: "Why, they are just as square as a block, and beat any hand-made brick I ever saw." And I said to him: "There is the machine that makes them. He is always on hand when wanted. He don't strike for higher wages, nor burn, nor go out to see the girls and come around in the morning and say, 'Well, I guess I can't work to-day.'"

I wish you the best of success, which you are entitled to.

Yours truly,

J. A. MODER.

ROCKFORD, Ill., Oct. 29, 1887.

Gentlemen: I think the "New Quaker" the best brick machine I ever saw, especially for hard, stiff clay. My clay is very hard and sticky, but we work it satisfactorily. I have made almost one and a half million of brick the past season. I have not been to one cent's expense for repairs, and the machine is in perfect order to begin work in the spring. I make 15,000 per day with ease, and the men often get the day's work out at 4 o'clock. If I wanted a dozen machines I should take the "New Quaker" in preference to any other I have ever seen. I have worn out one of the old "Quaker" machines (bought six years ago), and got the new one, for they give the best returns of any machine I have ever seen. If this is of any good to you, you can use it in your circular.

Yours respectfully,
Horse-power.)

GEO. S. BROWN.

HASTINGS, Neb., Oct. 4, 1887.

Gentlemen: We take great pleasure in informing you that we are highly pleased with the work your "New Quaker" Machine has done for us. The second day we ran we made a test trial of 30 minutes, and made 1,123 bricks with a very ordinary team of horses and a set of green men. Your machine does all you claim, and we are satisfied. We are,

Respectfully yours,

STEWART & COLLINS.

JACKSON, O., Nov. 21, 1888.

Gents: The "New Quaker" Machine I bought of you last April is the best brick machine I ever saw. I can make twenty-five thousand per day if I crowd it. 15,000 per day was our day's work, and I can make better brick than can be made by hand. With good sand, good yard, and a good set of men I can make more and better brick on the "New Quaker" than any horse-power brick machine in the United States. Hoping you have had a good year selling machines. I remain yours,

W. T. WASHAM.

WAYNE, Neb., Nov. 15, 1888.

Gents: I have worked a great many brick machines, but never worked any that equalled your "New Quaker" machine. I worked but five men and a small boy. These hands and a team turned out 2,000 good brick per hour for as many hours as I wished to run. On a trial to see what the machine would do, we made 2,000 in 45 minutes. I would not take \$1,000 for my machine if I could not get another like it. Yours truly,

John F. SHERBACH.

KANSAS CITY, Mo., Nov. 15, 1888.

Dear Sirs: The Quaker Brick Machine we bought of you has given entire satisfaction. Our daily out-put has been 30,000 without any delay from breakdowns the whole season. We consider it the best mud machine in the market. Yours very truly,

GATES & BROOKS.

tenacious clay that has a tendency to stick in the moulds; the striker, after striking off the mould, gives it a slight bump back and forth against the iron bumpers, thus setting the mud free from the sides, which enables the bricks to slip with perfect freedom.

SAND.—The sand used with this or any other machine making bricks in moulds must be **CLEAN, FINE AND SHARP**, and it will be useless to attempt to use any other kind, such as the loamy, dirty sand so frequently used in hand-moulding. We are especially explicit in mentioning this from the fact that nine-tenths of the complaints ever made arise from the very reason that the parties attempt to sand their moulds with stuff not much better than dirt.

NUMBER OF MOULDS REQUIRED.—When the moulds have to be trucked away some distance to the drying ground, seventeen is the usual number used. If the pallet system is used, only five or six moulds are needed for either machine. In practice, money is well invested in a few extra moulds; they cost but little, and very frequently prevent time from being lost while operating. It is well when using only five or six to have two sets, so one set can always be washed and ready.

PLYMOUTH, O., Nov. 9, 1886.

Gentlemen: We started our "Quaker" Machine, bought of you last spring, without a man on the yard that knew anything about a machine, and made seven hundred thousand brick without being delayed in the least on account of the machine. We are all well pleased with it, and would cheerfully recommend it to any one who contemplates buying a brick machine.

Yours, etc., NIXON & NIMMONS.

RAVENNA, O., Jan. 9, 1886.

Sirs: I would say in answer to yours of the 8th inst., that I am well pleased with the "New Quaker." It fulfills my expectations, and is the best machine I ever saw. I like the horizontal pressure, especially.

Yours, etc., H. F. CARIS.
(Horse-power.)

CANTON, O., Oct. 21, 1887.

Dear Sirs: I will say that I think the "New Quaker" the best mud brick machine now made, and I can easily make 20,000 per day. I have had no breaking since I used it, and to-day it is just as good as the first day used.

Respectfully,
(Horse-power.) CH. RICHL.

RIVER STYX, O., Oct. 15, 1887.

Gents: The Brick Machine bought of you last spring is just the thing to make brick. Can make two thousand an hour with six good men, and make a perfect brick.

Yours respectfully,
(Horse-power.) O. T. STAUFFER.

BRYAN, Minn., Oct. 27, 1888.

Gentlemen: It is with pleasure I add my testimony in favor of the "New Quaker" Brick Machine, purchased of you last spring. I am pleased with its work in every particular, and would say to all in want of a brick machine, do not spend time in looking for a better one than the "Quaker." Give it plenty of clay, power and good moulding sand, then it will make brick as fast as any set of hands can take care of.

Yours very respectfully,
C. NELSON.

ROCKFORD, Ill., Oct. 25, 1887.

Sirs: Having used two of your horse-power "New Quaker" Machines this season, we must say they beat all we ever saw. We have no trouble with the machines being out of repair, not having lost a half day on that account, and have not paid a dollar for repairs.

Yours respectfully,
SICANDIA BRICK CO.
Charles Bjarklund, Manager.

COSEAUT, O., Oct. 21, 1888.

Gentlemen: The Horse-power Machine has worked very satisfactorily in every respect. It always makes square, perfect brick when we do our part. It will make as many brick as you have a mind to turn out. Any one wanting a machine cannot find a more perfect one than the "New Quaker." I have never dealt with any one who has been more prompt, or done more fairly by me than you have.

Success to the "New Quaker."
Yours truly,
JOSEPH SMITH.

NORTH YAKIMA, Washington Ter.,
Nov. 15, 1888.

Dear Sirs: I have used your machine this season with the best possible results, and recommend it to any who are wanting a machine. I am now making a first-class brick from sagebrush soil—not a particle of clay in it. I have not paid out a dollar for repairs, and consider it the best machine I have seen. It is simply perfect, and makes a perfect brick.

Yours respectfully,
D. C. STONE.

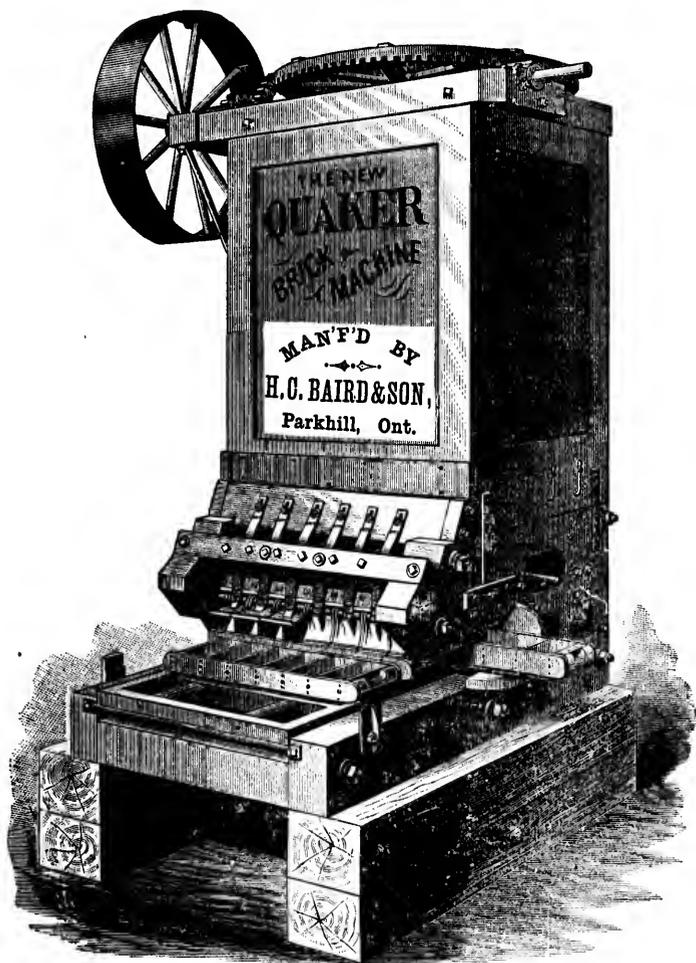
AUBURN, Ind., Nov. 12, 1888.

Gents: We have used the "Quaker" Machine one season, and think it is one of the best machines in the market. For working all kinds of clay it cannot be equalled.

Hoping you will have success, as you greatly deserve, with your machines, we remain,

Yours, etc.,
GROSCOP BROS.

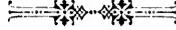
The Steam-Power Machines



Make from 20,000 brick per day to as many as can be handled, with eight to twelve horse-power engine, and six to eight men, according to clay and convenience of handling.

We furnish tight and loose pulleys with each machine, instead of a single pulley as shown above.

THE STEAM-POWER MACHINES.



THE operation of the Steam Machine is similar to that of the Horse-power except that the grinding knives are geared to run two and one-half times as fast as in the Horse-power, thus tempering the clay much more thoroughly, and so IT IS BETTER TO USE STEAM-POWER WHEN POSSIBLE, and especially in clays that are tough and need thorough tempering; also for this reason, more power is required in proportion to the number of bricks made than with the Horse-power Machine. They are throughout strongly and substantially built machines.

The opening for feeding the machine is not shown in the cut, but it is just under the main cog-wheel, on the back of the machine.

The machine is so geared that the main cog-wheel passes around once to each mould of brick pushed out. If the machine is driven to make 2,880 per hour, or eight moulds per minute, the pulley should take 152 revolutions per minute. The tight and loose pulleys we furnish are thirty-six inches in diameter and have eight-inch faces.

THE REGULAR STEAM-POWER MACHINE is the same as the Horse-power, with the addition of the necessary gearing.

PETERSBURG, IND., 11th mo., 16th, 1888.

Gents: The "New Quaker" Machine I purchased of you last April I can truthfully say I am highly pleased with it. I have made 500,000 of the best brick I ever made. It has not cost me five cents, and I haven't had any trouble whatever. We make 10,000 brick every morning and put the same in kiln in the afternoon, with one striker one sander, three truckers, two to feed the machine, and one engineer, at a net cost \$10.00 from the bank to the kiln, while it cost by hand-making \$19 for the same amount. We can make brick as fast as we can get mud into the machine and get the brick away. In fact it is the best machine we have ever seen, and can cheerfully recommend it to any one who wants to purchase one.

Respectfully, THOMAS READ.

MUNCIE, IND., Oct. 27, 1888.

Sirs: This is to certify that I have thoroughly tested the "Quaker" Brick Machine and think it has no equal for running light and doing its work perfect in every respect. On a test we made 2,412 in thirty minutes. I cheerfully recommend it to all who need a machine.

Yours with respect,

JAMES A. GANTIN.

SUPERIOR, NEB., Nov. 15, 1888.

Gents: In regard to the "New Quaker" Brick Machine (horse-power) we bought last spring, we can say it has given entire satisfaction. We have moulded 1,100,000 brick with it this season. Can easily mould 15,000 to 18,000 per day, and all good square brick. Could not be without it, and gladly recommend it to all brickmakers wanting a machine.

Very respectfully,

J. F. McCORKLE & CO.

The Horse-Power Machine.



The Above Cut Represents the Horse-Power as Set for Use on Many Yards.

IT MAKES FROM FIFTEEN THOUSAND TO TWENTY THOUSAND bricks per day, with two horses and five to seven men, according to quality of clay and convenience of yard, etc. It is built of strong material and well put together. The working parts are all iron. It is six feet high, five and one-half feet long at the bottom, and three and one-half feet wide. Weight, about 3,200 pounds. This machine fills a long-felt want, namely, a good machine at a moderate price, within the reach of owners of small yards, who do not wish to invest too

DANBURY, Conn., Oct. 1, 1887.

Sirs: In reply to your question, I can truly say the "New Quaker" Brick Machine, sent me by you, does all I could ask or expect. Having used, in the eighteen years I have been in the brick business, three different machines, I consider the "New Quaker" superior to them all in every respect.

Yours respectfully,

F. P. RICH.

BRYAN, Tex., Nov. 17, 1888.

Sirs: Yours received, and in reply will say, I am very much pleased with the "New Quaker" Machine. I make, in ten hour's work, 14,000 good brick, and the machine makes better brick than there ever was made in Bryan. The brickmakers who have seen it work say that it does better work than any machine they have ever seen, and a great many brickmakers from adjoining counties have been here to see it, who were all well pleased with it.

Respectfully,

PETER WINTER.

SPRINGDALE, Ark., 11th mo., 16th, 1888.

Gents: I have made some 700,000 or 800,000 brick with my machine. I have had no trouble with it; it works well. As for the wear of the machine, there is none as far as I can see at present. It saves me from \$3 to \$4 per day while I am running it. I dump on the yard and make good brick.

Respectfully,

E. T. CAVDLE.

NEWARK, O., Nov. 18, 1886.

Dear Sirs: The "New Quaker" Brick Machine is all right in every respect. I bought a "Quaker" Machine in 1883, and made over 1,000,000 of brick every season, and worked clay that no man could mould by hand. I like the "Quaker" Machine so well that I bought one of the "New Quaker," in June, 1886, and am still making brick in the dry yard. I used both machines during the summer season.

The new style of machine is a better and stronger machine than the old style.

Yours very truly,

(Horse-power.)

C. WEIPPERT.

much in a machine, and yet wish to make a better brick at a less cost than can be done by hand-moulding.

These machines are arranged so as to be easily changed to steam-power by the addition of the necessary gearing.

CAPACITY.—The longer you make your sweep the longer it will take your horses to make the circuit, and the less circuits they can make in a day, but the easier it will be on the horses. The sweep is usually made about 16 feet long, from centre of machine to end of sweep, where the horses are hitched. The other end needs to project, so as to make weight to balance the sweep: This machine turns out five moulds of six bricks each to each two turns of the horse.

MEN REQUIRED.—It requires two shovelers to feed the machine, one sand-er, one striker and two or three off-bearers, according to distance to drying ground. This set easily turns out 20,000 per day, which is the ordinary average of these machines.

MANNER OF PREPARING CLAY.—The clay is put into a pit and thoroughly soaked over night, then shoveled into the machine, quite a little stiffer than for hand-moulding, being thoroughly tempered and ground as it passes down by ten knives on the main upright shaft.

In some clays these ten knives actually temper the clay too much, and one has to be taken off. Other clays may need more grinding and another knife can be put on, or rods put through the pug-mill of the machine, which will have the same effect. Usually the ten knives will be just about right.

VANKLEEK HILL, Ont., July 20th, 1886.

H. C. Baird, & Son,

Dear Sir:—In reply to your inquiry we say that after using your Kell's Machine for over two months, I am satisfied that it the best Brick and Tile Machine manufactured in Canada, and that its capacity is greater than what you claim for it. Yours respectfully, J. C. POTTER.

DUNMORE, PA., Jan. 11, 1886.

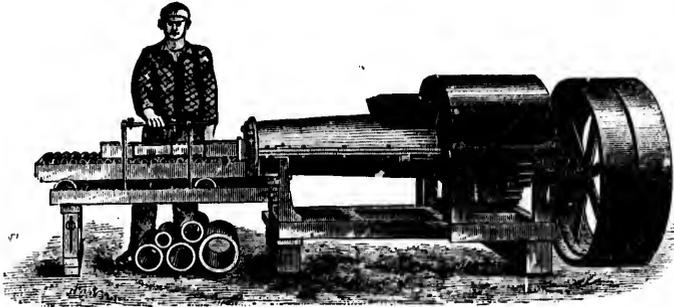
Dear Sirs: The "New Quaker" Brick Machine that I bought last season has given good satisfaction. It hasn't cost me anything for repairs, and I do not hesitate to say, in my judgment, it is the best machine made.

Yours truly, GEORGE W. FROST.
[Horse-power.]

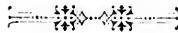
AURORA, ONT., August 27, 1886.

H. C. Baird & Son, Parkhill, Ont.:

Dear Sir. I have been using Brick and Tile Machine, purchased from your agent, Mr. Cornell, for about two months, and am exceedingly well pleased with both quality and quantity of the bricks made by it. I make considerably more than double the quantity each day that I used to make with my former machine, without taking into account the wide difference there is in the quality. Both purchasers and the masons who have laid them speak very highly of them. Wishing you every success, I remain, yours truly, WALTER H. MACIELL.



Kells' Improved Combined Brick and Tile Machine.



Patented February 23rd, 1885.



Speed of Counter Shaft from 80 to 100 revolutions per minute.

Weight of Machine, 2,600 lbs.

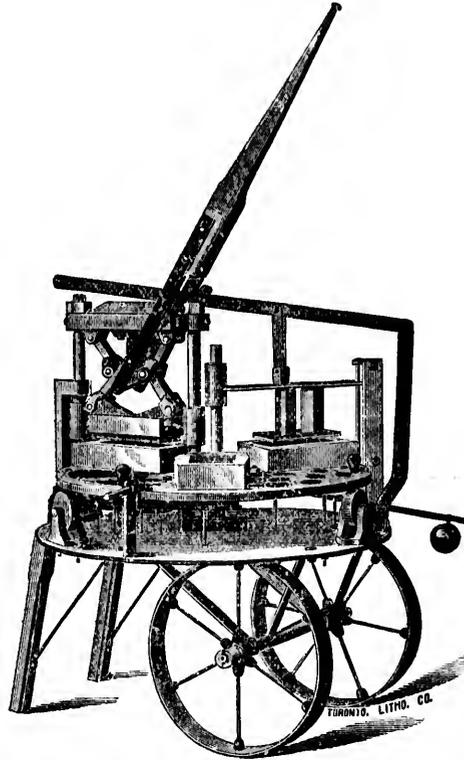
CAPACITY for Brick making, 30,000 per 10 hours.

CAPACITY for Tile-making as follows:

| | | | | |
|----|----|------------|-------------------|----------|
| | 2½ | inch tile, | from 8000 to 9000 | per day. |
| 3 | " | " | 8000 | " " |
| 4 | " | " | from 6000 to 7000 | " " |
| 5 | " | " | 6000 | " " |
| 6 | " | " | from 4000 to 5000 | " " |
| 7 | " | " | 3000 | " " |
| 8 | " | " | from 2000 to 2500 | " " |
| 10 | " | " | from 1500 to 2000 | " " |

For details and testimonials refer back to pages 2—5.

Baird's "Perfection" Re-Press Machine.



(Patent applied for.)

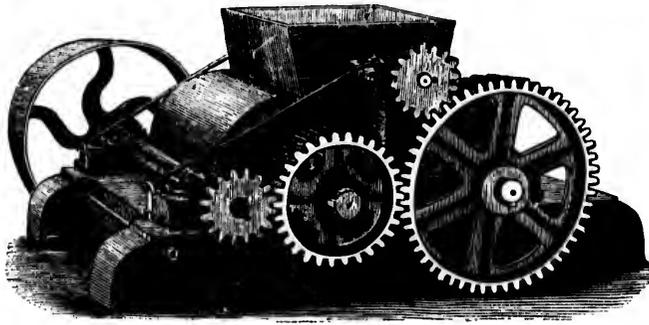
The Capacity of this machine is double that of any other re-press machine now in use. For details see page 24.

NEW QUAKER HORSE-POWER BRICK MACHINE.

THE CUT ON THE INSIDE OF BACK OF COVER shows this machine in position in the yard, with horse-track and portable-bridge over the track; also three clay-soak-pits, which enables the operator to have clay soaking in one while a second is being filled and the third emptied. For details of the New Quaker Horse-power Machine, refer back to pages 12 to 13. For Special Features pages 6 to 12, and Testimonials 6 to 13 and 17 to 27.

OUR IMPROVED CLAY CRUSHER.

Weight of Machine, 2,800 lbs.

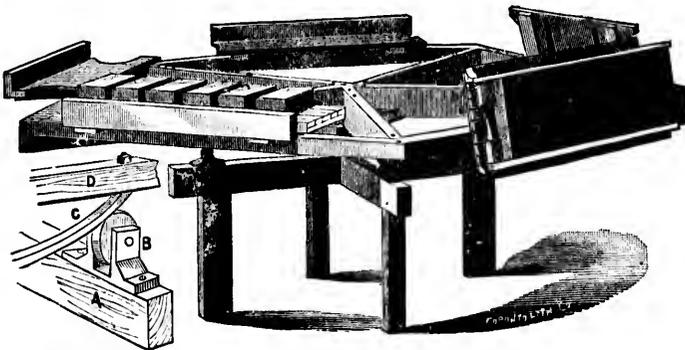


Capacity Unlimited.

Speed of Counter Shaft About 150 Revolutions Per Minute.

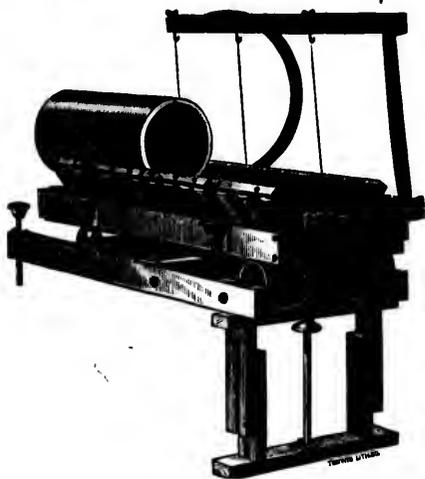
SEE PAGE 27.

REVOLVING DUMP-TABLE



SEE PAGE 23.

Improved Patented Tile Cut-Off Table.



THIS CUT SHOWS OUR IMPROVED PATENTED TILE CUT-OFF TABLE.

THE above cut represents our IMPROVED PATENTED CUT-OFF TABLE which has been in use during the past season, not only on our own make of Machine, but on several other makes, and has been clearly proven to be unequalled as a Tile Cut-off. Little need be said about it as the cut so clearly represents the table that it will commend itself to anyone who has ever used a Tile Cut-off. This table is adapted to handle tile from 2½ up to 10 inches. The tile from 6 in. up to 10 inches are supported on three sets of rollers as shown in the cut, the rollers being parallel avoid all possible danger of the clay clogging to them. For from 5 to 2½ in. tile the bottom set of rollers are taken out and the tile supported on the two side rollers, which can be adjusted to support the tile where required, and hold it in perfect shape until delivered at the end of the table. These rollers are so arranged that they can be fitted into any of our former make of tile cut-off tables at a very reasonable price.

This table was on exhibition at Toronto, Sherbrooke and London in 1887, and acknowledged by all practical tile makers to be the completest and most effective tile cut-off they had ever seen.

MT. GILEAD, O., Oct. 30, 1888.

Dear Sirs: The second New Machine more than fills the bill. I believe the "New Quaker," with good sand, will work in any kind of clay. The first machine I worked for eight years, but the "New Quaker" will last much longer.
Respectfully,
JOSEPH HICKSON.

HUNTSVILLE, Ala., 11th mo., 19th, 1888.

Gents: We will say, in regard to the Horse-power Brick Machine purchased of you last spring, that we are well pleased with the way it works, making nice, square brick. We turn out 14,000 brick per day, but could do better.
Yours respectfully,
S. L. FRANKENBERG & CO.

BRICK-YARD SUPPLIES.

~w~

WE HAVE ALMOST CONSTANTLY ON HAND a supply of new and second hand Engines and Boilers from twelve (12) to forty (40) horse-power, suitable for brick yard purposes, which we sell at very low figures.

Also Rubber and Leather Belting, direct from the Manufacturers, at first cost.

All information necessary with regard to Power, Location and Speed of Machinery cheerfully given on application,

Full printed instructions, showing plan of yard and machinery, go with each machine, which are of great importance to the brick-maker, and when properly carried out, according to instructions, either machine will do all and more than we claim for it, as the testimonials presented in this catalogue will prove.

Give them a trial and be convinced.

H. C. BAIRD & SON.

CASTERS.

THE style with the horse-power is shown in the cut with the Horse-power Machine. We use a 12-inch car-wheel with $1\frac{1}{2}$ -inch turned wrought iron axles. Boxes, cross-timbers, and the necessary screws furnished with each set.

Most of the Steam-power Machines are set stationary, but for those who wish to put them on a track, we furnish casters with 16-inch heavy car-wheels and $1\frac{1}{2}$ -inch turned wrought iron axles, with the cross-timbers, boxes and necessary screws.

PERIN, ILL., Oct. 1, 1887.

Gentlemen: In reply to your favor for our experience with our machine, will say we have had full satisfaction, and can make a first-class brick from one-third top clay and two-thirds joint clay, and dry them on the open yard, which we could not do with the old machine. We could not say too much in favor of the machine.

Yours truly,
 (Horse-power.) HAMILTON & CO.

GRAND FORKS, DAK., Oct. 10, 1887.

Dear Sirs: The two "New Quaker" Machines I bought of you last spring I am more than pleased with. I had one shipped to my brickyard in Manitoba and the other I am using here. I am making with six men, from 18,000 to 20,000 per day. If I should start another yard I would order your machine.

Yours truly,
 (Horse-power) J. S. BARTHOLOMEW.

HASTINGS, NEB., Nov. 27, 1887.

Gentlemen: We have made 1,800,000 brick this year with the "New Quaker" Machine we purchased of you last spring, for our yard at Holdrege, Neb. We had no trouble in setting up or operating the machine, although all the men were green hands with a machine. It has cost us nothing for repairs so far.

Yours, etc,
 (Horse-power.) McELHINNY & JOHNSON.

NELSON, NEB., Nov. 19, 1887.

Gentlemen: We have been running one of your "New Quaker" Brick Machines for the last two months, by horse-power, and made 16,000 to 18,000 per day. Its work exceeds our highest expectations, and we gladly recommended it.

Yours,
 (Horse-power.) STORER & SPURCK.

MONTICELLO, ARK., Oct. 20, 1887.

Gentlemen: I wish to say that your machine has done all you claim for it, and consequently I am well pleased. I have made about 300,000 and they are as true as I have ever seen. To brickmakers in need of a machine, I would say by all means get a "New Quaker" Brick Machine.

Yours truly,
 (Horse-power.) H. S. TRUITT.

KASOTA, MINN., Oct. 28, 1887.

Gentlemen: We are using your Horse-power Machine, and are well pleased with it. We now have over 200,000 of as true brick as ever were seen. To brickmakers we will say the "New Quaker" will do as represented.

Yours truly,
 MARTIN & MEYER.

SUPERIOR, NEB., Nov. 15, 1888.

Gents: In regard to the "New Quaker" Brick Machine (horse-power) we bought last spring, we can say that it has given entire satisfaction. We have moulded 1,100,000 brick this season. Can easily mould 75,000 to 18,000 per day, and all good square brick. Could not be without it, and gladly recommend it to all brickmakers wanting a machine.

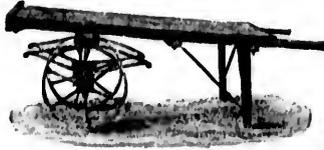
Very respectfully,
 J. F. McCORKLE & CO.

MUNCEY, IND., Oct. 27, 1888.

Sirs: This is to certify that I have thoroughly tested the "Quaker" Brick Machine, and think it has no equal for running light and doing its work perfect in every respect. On a test we made 2,112 in thirty minutes. I cheerfully recommend it to all who need a machine.

Yours with respect,
 JAS. A. GARTIN.

Platform Barrow.



THIS OUT SHOWS OUR PLATFORM BARROW.

THIS Barrow is mounted on two iron wheels (wrought iron spokes) 20 inches in diameter, with good steel elliptic springs, as illustrated above. It is used for wheeling brick or tile from the machine to the hake or shed.

SIDNEY, O., Nov. 9, 1887.

Dear Sirs: You ask me how I like my machine. I want to tell you, I am well pleased with my machine and implements I bought of you last spring. I am a brick-moulder by trade, having worked at it thirty years, but I really think the "Quaker" can beat any moulder I ever saw. We have a very tough, yellow clay, that is difficult to mould by hand, but it is a pleasure to work it with the "Quaker." I found you honest and square to deal with.

Respectfully,
(Horse-power.) SAM'L KAESAR

BEHLIN (Loramie P.O.),
Shelby County, O., Nov. 13, 1886.

Gents: The "New Quaker" Machine I purchased of you last spring works better than I expected, and is all that can be required. It makes a nice, smooth brick, and is in every way what a brickmaker needs. I would not do without it if it costs double the price, and would recommend it to all brickmakers as a first-class machine.

(Horse-power.) C. WAGLER.

MOUNT MORRIS, N. Y., Oct. 20, 1887.

Sirs: I have been in the business of brick-making upwards of twenty years, and have used different kinds of machines, and find yours the best I ever used. It makes the most perfect brick and the greatest number when properly managed. It will make 25,000 or 30,000 per day. I have used it three years and not spent one dollar for repairs.

Yours truly,
DAVID RULBUCHT.

SPokane Falls, Wash. Terr.,
Oct. 14, 1887.

Gents: Yours of September 28th is at hand, and in reply would say that we are well pleased with our machine. We make as good brick as the "—" the only other machine used here, and we have the hardest clay to work. We will sell one or two more machines here next year.

(Horse-power) N. TRIPLET & Co.

BRIDGETON, N. J., Oct. 29, 1888.

Gentlemen: The "New Quaker" Brick Machine which I bought from you last spring, has given perfect satisfaction. It did excellent work at the start, and continued the same during the entire season. I have made 1,200,000 brick with it, and I never had a breakage or trouble in any way.

Any one contemplating putting in a Brick Machine, I would advise them to use the "New Quaker," for it does all that is claimed, and does it satisfactorily.

Yours respectfully,
A. H. LUPTON.

NORTHAMPTON, Mass., Oct. 17, 1887.

Gentlemen: I can say, with truth and pleasure, that I find the "New Quaker" the best soft mud machine I have ever seen, and the Pug-mill exceeds my most sanguine expectations. It does its work splendidly.

Yours very truly,
PORTER NUTTING.

MADISONVILLE, O., Nov. 13, 1886.

Dear Sirs: In answer to your letter we will say we have found your "New Quaker" Brick Machine all it was recommended to be. We have made as good, square brick as can be made. We have run steadily all summer, and turned out 1,000,000 brick, and have had no breakage since we used it.

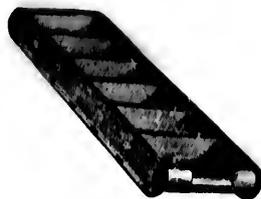
(Horse-power.) D. MATHIAS & BRO.

HARTWELL (near Cincinnati),
Hamilton County, O., Jan. 20, 1886.

Dear Sirs: In regard to the "New Quaker" Brick Machine, will say that I think it the best mud brick machine now made, and I can easily make 24,000 per day. I have had no breakage since I used your machine, which is a great saving in time and money over other machines.

Yours respectfully,
JOHN A. HOESMAN.

M O U L D S .



This cut gives a fair idea of the Moulds we furnish.

THEY are iron-bound; the irons on the sides of the moulds passing all around the bottom, (partly shown in cut), and the iron cross-pieces being dovetailed into the sides. We think they are as strong and compact, and at the same time as light, as can be made and avoid unnecessary weight and clumsiness. They will be made of cherry unless some other kind of wood is desired.

We keep the following sizes in stock, these being the most common sizes in use:

| | | |
|------------------------------|------------------------------|------------------------------|
| 8 $\frac{1}{2}$ inches long, | 4 $\frac{1}{8}$ inches wide, | 2 $\frac{1}{2}$ inches deep. |
| 8 $\frac{3}{4}$ " " " | 4 $\frac{1}{4}$ " " " | 2 $\frac{3}{4}$ " " " |
| 9 " " " | 4 $\frac{3}{8}$ " " " | 2 $\frac{1}{2}$ " " " |

The second of the above sizes we call the "standard" size.

We can, however, furnish any size required upon short notice. In ordering, please state definitely, so that no mistake will be made, the exact length, thickness and width you want your bricks green.

CARBONDALE, Pa., Oct. 25, 1885.

Sirs: Your Brick Machine did all you claimed it would do. I have the hardest clay to work I ever saw—both blue and yellow and plenty of stones. Stones don't hurt the machine. It has not cost me anything except the iron on the top of the shaft for the pole.

Yours truly,

THOS. HUNTER.

Wahoo, Neb., Oct. 30, 1888.

Dear Sirs: I must let you know that I am well pleased with the "New Quaker" Brick Machine. It has made better brick for me than I have made in ten years, in the same yard and with less expense. Two common horses, six men, with two trucks and fourteen moulds, have made 14,000 brick a day for me. I have made 2,000 per hour several times in trying it. Yours truly,

MARCUS SCHMIDT.

NORTH BALTIMORE, O., Oct. 20, 1888.

Dear Sirs: As regards the machine I bought of you last spring, would say, that it has given entire satisfaction in every respect. I recommend it to any one wanting a good machine.

Yours, &c.,

J. D. BURRELL.

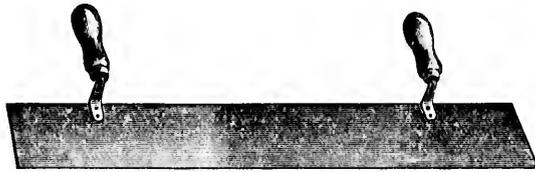
GRAND UNION HOTEL, OTTAWA,
Can., Oct 27 1888.

Gentlemen: As this season is about over I think I should write and let you know how the "New Quaker" Brick Machine I purchased from you last winter has worked.

I worked two other machines in the same yard and experienced less trouble and expense with yours than with the others. In short, it gave me every satisfaction and should I have to add to my plant I will gladly patronize your firm.

Yours truly,

JOHN GRAHAM.



THIS SHOWS OUR NEW STRIKE-KNIFE, made of heavy tempered steel, and considerable heavier than those used before. With it the whole mould of brick is struck off at one forward motion, and this is acknowledged the simplest, quickest and best way to strike off a mould.

Price, \$2.00 each.

One is furnished, without extra charge, with each machine.

MARYSVILLE, O., Nov. 17, 1883.

Sirs: We have used your Brick Machine for eight years, and it never needed any repairing, and we commend the same, to all wanting a machine, as the very best in the market.

PHILLIP BURNS & BRO.

MONTPELIER, O., Nov. 14, 1888.

Gentlemen: The regular Steam-power Machine we purchased of you last spring gives perfect satisfaction in every respect. We have not paid out a cent for repairs. Would not make brick without it.

Yours truly,
SLAYBAUGH & BOON.

NEWTON, Iowa, Oct. 1887.

Gentlemen: The Horse-power Brick Machine which I bought of you last spring, gives splendid satisfaction, and when the men who work the machine are careful, and have mud as it ought to be, I think the machine cannot be beaten, for it makes a perfect brick, and it will pay any brickmaker, because there is a better demand for such kind of brick, and can always get better prices.

Yours respectfully,
WM. HENNING.

INDIANA, Pa., Oct 25, 1888.

Sirs: We bought a "New Quaker" brick machine (steam-power) from you last spring and started it without a man on the yard knowing anything about it, and found it capable of turning out from 20,000 to 30,000 a day, making a smooth, square brick much superior to hand-made brick. We furnished brick for the Odd Fellows' Hall, and the best of bricklayers pronounced them fine. We cheerfully recommend it to any one contemplating buying a brick machine as doing all and more than the manufacturers claim for it.

Very respectfully,
MCCOY & RALSTON.

COLUMBIA CITY, Ind., Nov. 13, 1888.

Gentlemen: We received the "New Quaker" Brick Machine last spring, and were somewhat discouraged when we landed it on the yard, but, when we got it in operation, were very agreeably surprised. I must say, when the clay is well tempered, and you have clean, fine, sharp sand, that it makes brick almost equal to press brick, therefore, we can recommend it to the trade through our experience with the machine.

Very truly yours,
FRANK A. GREEN & BRO.

CHETOPA, Kas., Oct. 17, 1887.

Gentlemen: I wish to say that I have been in the brick business for more than forty years. Have tried and seen tried many brick machines, but the "New Quaker" beats them all. We, none of us, ever saw it working, but had no trouble in starting up. There is nothing to get out of repair. You can make 15,000 to 20,000 a day by horse-power and as many more by steam power. No master brickmaker should be without a "New Quaker" Machine, for she is always on time, never gets on a spree, never gets sick, and any one can run it.

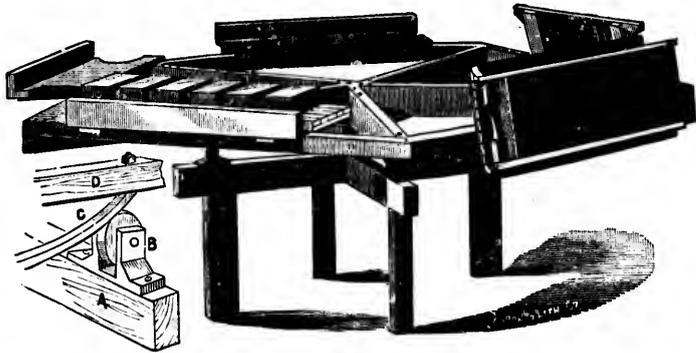
Yours truly,
(Horse-power) CHAS. CRANWEL.

HELENA, MONTANA, Nov. 1, 1888.

Gentlemen: The two "New Quaker" Brick Machines purchased of you this season have given perfect satisfaction. We have also two of the old style extra heavy "Quaker" Machines. We have no trouble in making 25,000 bricks in eight hours with each machine. The new Quaker has many advantages over the old style Quaker; it does more than you claim for it. We have run this whole season without a breakdown of any kind. I can cheerfully recommend the "New Quaker" Brick Machine to any one who wants a good machine which turns out perfect brick every time.

Yours respectfully,
CHAS. H. BRAY,
Supt. of Nick Kessler's Brickyards.

Revolving Dump - Table.



WE ASK ATTENTION to our REVOLVING DUMP-TABLE, used for dumping brick on to pallets. There are five dump-tables, and they revolve at a slight touch, there being an iron circular track, running on four iron rollers. The small sketch in the corner shows the iron track and one roller, as these do not show well in the larger cut. It is set so that it is convenient to the dumper who dumps his mould of brick, and a boy puts on the pallet and turns the table so that it is ready for the next mould. The loaded pallets come around towards the yard where they are taken away. It is well-made and well-liked by all who use it.

GREAT FALLS, Montana, Nov. 1, 1887.

Gentlemen: I have just received your letter asking for my opinion of the "New Quaker" I have been using the past season.

The clay here is very difficult to work in any machine, but the "Quaker" gets there in good shape every day. I believe it to be the best Brick Machine manufactured.

Very respectfully,

THOS. C. KING.

LA GRANGE, Ind., 11th mo., 9th, 1886.

Gents: During the past season your "New Quaker" Machine has done good work for me. My foreman regards it as a wonderfully good machine. We have made a great many brick during the year, and of such quality and shape that we could not supply one-half the demand, and do not have any brick to sell to-day.

Yours, &c.,

F. E. DICKINSON.

HAMMURG, Pa., Nov. 8, 1886.

Gentlemen: We have used your "Quaker" Brick Machine for the past four seasons with good results. We do not hesitate to call it the best machine in the market. We think the "New Quaker" machine which we bought of you last spring is a great improvement over the first one we had, because it makes a more perfect brick. Our machine is a horse-power. We make 15,000 brick for a day's work, and make them in seven hours with ease. In the four seasons that we used your machine, we made about 7,000,000 brick. The Philadelphia and Reading L. & Co. are using our common brick for the front of the new depot at Pottsville. Further, would say, that brick made by the "Quaker" are far superior to hand-made brick, because they have no sand cracks, which is usually the trouble with hand-made brick. We heartily recommend the machine to those wishing a good, cheap machine.

Yours respectfully,

(Horse-power.) TOBIAS BROS. & CO.

FREDONIA, Kan., Dec. 15, 1886.

Gentlemen: The "New Quaker" works to perfection. I have never seen anything that will compete with it. Since the 15th of August I have made 800,000 of the nicest brick ever burned in this section. I dump my brick in the yard, making a nicer, smoother, and a much tougher brick than any hand-made I ever saw. There are no cups and no sand spots. They do not sun-crack, and the mason can cut them in any shape desired. My entire expense on the machine this season was thirty cents for a couple of gallons of lubricating oil. It has proven all that is claimed for it, and has more than met my expectations in its rapidity, and especially in the fine quality of brick. Any brickmaker contemplating buying a machine cannot afford to buy any but the "New Quaker." Any one desiring information as to how the machine works in Kansas clay, it will be cheerfully given by addressing

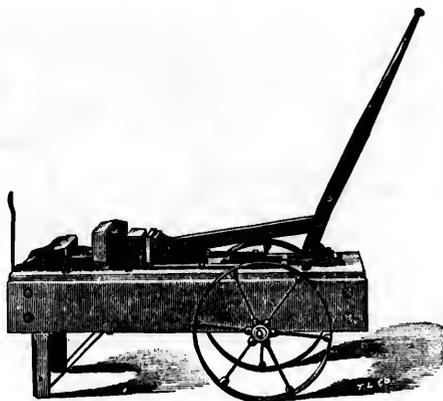
Yours truly,

(Hand-power.) ELI CHEENUT.



THIS cut shows our NEW RE-PRESS, for which a patent is being applied for. It will be seen at a glance that the capacity of this re-press is double that of any other re-press in the market, at the same time being very simple, strong and powerful. It requires one man and two boys to operate it. We use three dies, placed in a turn table, and divided at three equal distances apart. One boy puts a brick into the first die; he then revolves the table and brings this die directly under the press. One man at the lever presses the brick, and with the same operation of the lever it forces a brick out of the third die, which is taken out below on a pallet board and haked. There is a pallet board on the lever to which the weight is attached, which comes up nearly to the bottom of the die, the weight being adjusted to counter-balance the brick, so that when the brick is taken off on a small pallet and haked, the pallet board, or end of lever, comes up ready to receive the next brick. The press-plate, which forces the brick out of the die, is filled with oil, and thoroughly lubricates the inside of the die as it passes down and up through it. The dies can be made any size to order, and, when not specially ordered, will be made $8\frac{3}{4}$ long, $4\frac{1}{4}$ wide, and the thickness can be altered to suit. We trust that intending purchasers will investigate the true merits of this press before placing their orders.

Hales' Re-Press.



THIS Machine accomplishes all that was intended by the inventor—simply to fill the requirements of brickmakers in small towns and villages where only a few press brick are used. It makes just as perfect a re-press brick as any machine, and is sold at a very low figure. It is very strong and simple in its construction, and weighs about 550 pounds. The die, unless otherwise ordered, will be $8\frac{3}{4}$ long, $4\frac{1}{4}$ wide. The thickness can be regulated to suit.

 GIVE IT A TRIAL AND BE CONVINCED.

KEWASKUM, Wis., Oct. 6, 1887.

Sirs: I would say in answer to yours, that I am well pleased with the "New Quaker" Machine. It makes good, square brick, and as fast as they can be taken care of. I have made from 17,000 to 18,000 per day.

Yours respectfully,
HERMAN BUSS.
(Horse-power.)

NEW BREMEN, O., Nov. 3, 1888.

Gents: You want to hear about the machine you sold me in the spring. Well I am more than pleased with it; it gave entire satisfaction, and certainly is the simplest and most durable machine in the market. It is a brick machine complete. Respectfully,

ERNEST HILGERMAN.

WARRENTON, Va., 11th mo., 14th, 1888.

Gents: The "Quaker" machine I bought of you last spring I consider a first-class soft-mud machine in every respect. I have made one kiln of brick with the machine and I consider the brick better than hand-made. I use lean sand to sand the moulds, and the bricks are nice, square and smooth; and with two horses, two men and three boys the machine will make 350 brick every ten minutes if properly run. It more than fills the bill in all that is prescribed by you for it to do. Respectfully,

E. M. JOLLY.

LA SALLE, N. Y., Oct. 22, 1887.

Sirs: The Horse-power "Quaker" we bought in April, 1883, has now been running five seasons. Has not cost a cent for repairs except what little fixing I have done to it myself, and is still in fair running order. It has proved to be all claimed for it when we bought it.

Yours respectfully,
S. & H. TOMPKINS.

LEBANON, N. IL., Oct. 19, 1887.

Dear Sirs: I have used your Horse-power Brick Machine for three years and am well pleased with it. The more I use it the better I like it. It makes good square brick and the masons like to lay them.

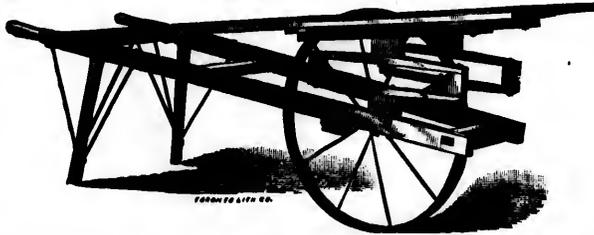
Yours truly,
JASON DENSMORE.

OSWEGO, N. Y., Nov. 10, 1887.

Dear Sirs: I will say in reference to your inquiry about the "Quaker" Brick Machine, that, in my estimation, it is one of the most complete and best machines manufactured on the continent to-day. I have been a brick-maker for over thirty years, and have been using two on separate yards for the last four or five years, and have experienced no trouble with the same.

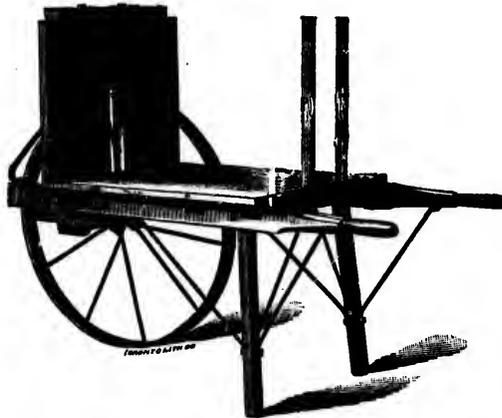
Yours respectfully,
JAMES GALLAGHER.

Improved Platform Wheelbarrow.



THIS cut shows our IMPROVED PLATFORM WHEELBARROW. It is adapted for either brick or tile. The platform is 6 feet 3 inches long by 2 feet 1 inch wide, with wrought iron wheel and steel axle. The wheel is 30 inches in diameter, with $1\frac{1}{2}$ x $\frac{1}{2}$ inch tire. The boxings have three bearings, so that the wheel can be set forward or back to balance the load to suit the wheeler. We use two wooden springs, one on each side of the wheel, which has proven to be more satisfactory than the steel spring, and costs less than one-half the money. We have a large stock of these barrows on hand, and have put the price down very low to suit the times.

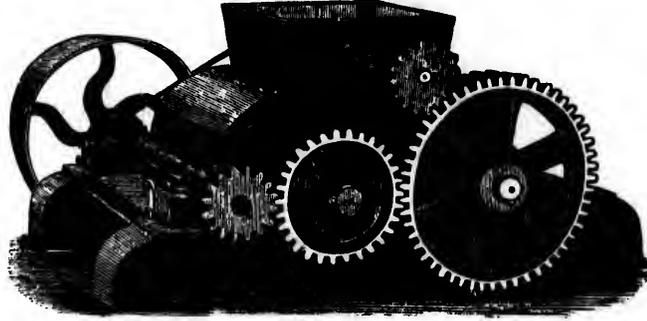
Improved Hack Barrow



THIS cut represents our IMPROVED HACK BARROW, adapted for brick and tile. The rake in front is used for wheeling tile, and is lifted out when being used for brick. The wheel is the same as in the Platform Barrow. The Barrow is well braced and framed together, and has been tested with ninety brick, weighing seven pounds each, which is the amount usually wheeled on this style of barrow.

OUR IMPROVED CLAY CRUSHER.

Weight of Machine, 2,800 Lbs.



Capacity Unlimited.

Speed of Counter Shafts About 150 Revolutions Per Minute.

THE above cut represents our IMPROVED CLAY CRUSHER, which has been greatly improved and remodelled, and we feel satisfied that it is second to none in the Dominion. The gearing has been changed from that shown in the cut. Instead of the gear on the rollers having 22 cogs of a difference, they have been changed to only 6 cogs of a difference, thus giving the rollers more feeding and more grinding capacity. The first, or driving roller, has a wheel on the other end, and the counter shaft is changed end for end in the Crusher, and the pulleys should show on this side of the machine. We furnish tight and loose pulleys, 48 inches in diameter, with 8-inch face. We have also perfected our stone extractor, which delivers all the stones (which are too large to pass through the hopper at the side of the machine. The rollers are cast of hard iron, and chilled to avoid wearing. Each roller is 22 inches long and 19 inches in diameter. One roller is set in adjustable boxes, and can be set from one-eighth to three-eighth of an inch apart. We also have cast-steel knives under and between the rollers, which are adjusted on set screws to suit the position of the rollers. Its capacity is only limited to the ability of the operator to get the clay into the hopper.

GREENSBORO, N. C., Nov. 1, 1887.

Gents: The "New Quaker" brick machine, run by horse-power, which I bought of you last spring, is all right in every particular. It makes an average of 1,800 to 2,000 bricks per hour. I have 12 laborers altogether, at a cost of \$9.50 per ten hours. Cost of sand 25 cents per day. It is the only machine I have seen that will work the mortar as well as a tempering wheel. It compresses the mud into the moulds and they come out with square edges and corners. They are superior to hand-made brick in every way. I dump in the yard and they stand rain much better than hand-made, and less loss in the kiln by breakage. If I had to go back to making by hand I would quit the business.

Very respectfully,

D. N. KIRKPATRICK.

BALTIMORE (Calvorton Sta.), MD. }
Nov. 17, 1886.

Gentlemen: To speak of all of the "New Quaker" brick machine we bought of you last May, words of commendation only can be used. The machine never, in the six months of use, delayed proceedings a moment—no breakage of its parts ever occurred.

We have made, and can make with it any day, 15,000 bricks, with one pair of mules for power, and make bricks that have a much superior face to hand-moulded brick. Indeed, the face of these bricks are equal to hand-pressed fronts of this city. We like the machine and shall continue to use it.

Yours truly,

(Horse-power)

McGAW & CHAMBERS.

PULLEYS.

A Specialty Made of Pulleys with Iron Centres and Wooden Rims.

Bored, Turned, and Balanced, with Set Screws or Key Seats.

| DIAMETER INCHES. | WIDTH OF FACE IN INCHES. | | | | | | | | |
|---------------------|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 6 | \$ 2 35 | \$ 2 80 | \$ 3 25 | \$ 3 75 | \$ 4 25 | ..... | ..... | ..... | ..... |
| 7 | 2 50 | 3 00 | 3 50 | 4 00 | 4 50 | ..... | ..... | ..... | ..... |
| 8 | 2 75 | 3 25 | 3 75 | 4 25 | 4 75 | ..... | ..... | ..... | ..... |
| 9 | 2 87 | 3 37 | 3 87 | 4 50 | 5 00 | ..... | ..... | ..... | ..... |
| 10 | 3 00 | 3 50 | 4 00 | 4 75 | 5 50 | \$ 6 25 | ..... | ..... | ..... |
| 11 | 3 10 | 3 60 | 4 25 | 5 00 | 5 75 | 6 50 | ..... | ..... | ..... |
| 12 | 3 25 | 4 00 | 4 60 | 5 50 | 6 25 | 7 00 | ..... | ..... | ..... |
| 13 | 3 50 | 4 10 | 5 00 | 5 75 | 6 75 | 7 75 | ..... | ..... | ..... |
| 14 | 3 65 | 4 25 | 5 25 | 6 25 | 7 25 | 8 50 | ..... | ..... | ..... |
| 15 | 3 85 | 4 55 | 5 65 | 6 70 | 7 75 | 8 75 | ..... | ..... | ..... |
| 16 | 4 10 | 4 85 | 6 00 | 7 25 | 8 25 | 9 25 | ..... | ..... | ..... |
| 17 | 4 30 | 5 20 | 6 35 | 7 80 | 8 50 | 9 75 | ..... | ..... | ..... |
| 18 | 4 45 | 5 50 | 6 65 | 7 90 | 9 20 | 10 25 | ..... | ..... | ..... |
| 19 | 5 00 | 6 25 | 7 25 | 8 50 | 9 75 | 10 75 | ..... | ..... | ..... |
| 20 | 5 25 | 6 50 | 7 50 | 8 75 | 10 00 | 11 50 | ..... | ..... | ..... |
| 21 | 5 50 | 6 75 | 8 25 | 9 75 | 11 25 | 12 75 | ..... | ..... | ..... |
| 22 | 5 75 | 7 00 | 8 50 | 10 50 | 12 00 | 13 50 | ..... | ..... | ..... |
| 23 | 5 85 | 7 25 | 9 00 | 10 75 | 12 25 | 13 75 | ..... | ..... | ..... |
| 24 | 6 00 | 7 50 | 9 50 | 11 25 | 12 50 | 14 25 | \$16 25 | ..... | ..... |
| 25 | 6 50 | 7 75 | 9 75 | 11 75 | 13 25 | 15 00 | 17 00 | ..... | ..... |
| 26 | 7 00 | 8 25 | 10 00 | 12 50 | 14 25 | 15 75 | 17 50 | ..... | ..... |
| 27 | 7 50 | 9 00 | 11 00 | 13 50 | 15 00 | 16 50 | 18 50 | ..... | ..... |
| 28 | 8 00 | 9 50 | 11 50 | 14 25 | 16 25 | 18 00 | 20 00 | ..... | ..... |
| 30 | 9 50 | 11 50 | 13 50 | 15 50 | 17 50 | 20 00 | 23 50 | ..... | ..... |
| 32 | 10 50 | 12 25 | 14 50 | 16 50 | 18 50 | 22 00 | 25 00 | ..... | ..... |
| 34 | 11 25 | 13 00 | 15 50 | 18 00 | 20 50 | 24 25 | 28 50 | ..... | ..... |
| 36 | 12 00 | 13 75 | 16 25 | 19 00 | 22 00 | 25 75 | 30 25 | \$35 25 | \$40 75 |
| 38 | 13 00 | 15 50 | 18 25 | 21 50 | 24 75 | 29 25 | 33 50 | 37 50 | 42 00 |
| 40 | ..... | 17 00 | 19 25 | 22 50 | 27 00 | 31 75 | 35 25 | 39 50 | 43 50 |
| 42 | ..... | 18 00 | 21 00 | 24 50 | 28 75 | 33 50 | 39 50 | 44 00 | 48 50 |
| 44 | ..... | 19 00 | 22 25 | 26 0 | 31 00 | 35 75 | 40 75 | 45 75 | 51 00 |
| 46 | ..... | 20 00 | 23 25 | 28 00 | 33 25 | 39 00 | 45 25 | 50 00 | 55 00 |
| 48 | ..... | 21 00 | 24 75 | 30 00 | 35 75 | 42 00 | 46 75 | 52 25 | 60 00 |
| 50 | ..... | 23 00 | 27 00 | 32 50 | 38 00 | 45 00 | 52 00 | 58 00 | 65 00 |

Prices for Special Pulleys of any Diameter or Face given on application.
Send for discounts.

H. C. BAIRD & SON, Parkhill, Ont.



THE NEW
QUAKER
BRICK
MACHINE
MAN'F'D BY
I. C. BAIRD & SON,
Parkhill, Ont.

