I. R. ANDERSON.

PEANUT ROASTER.

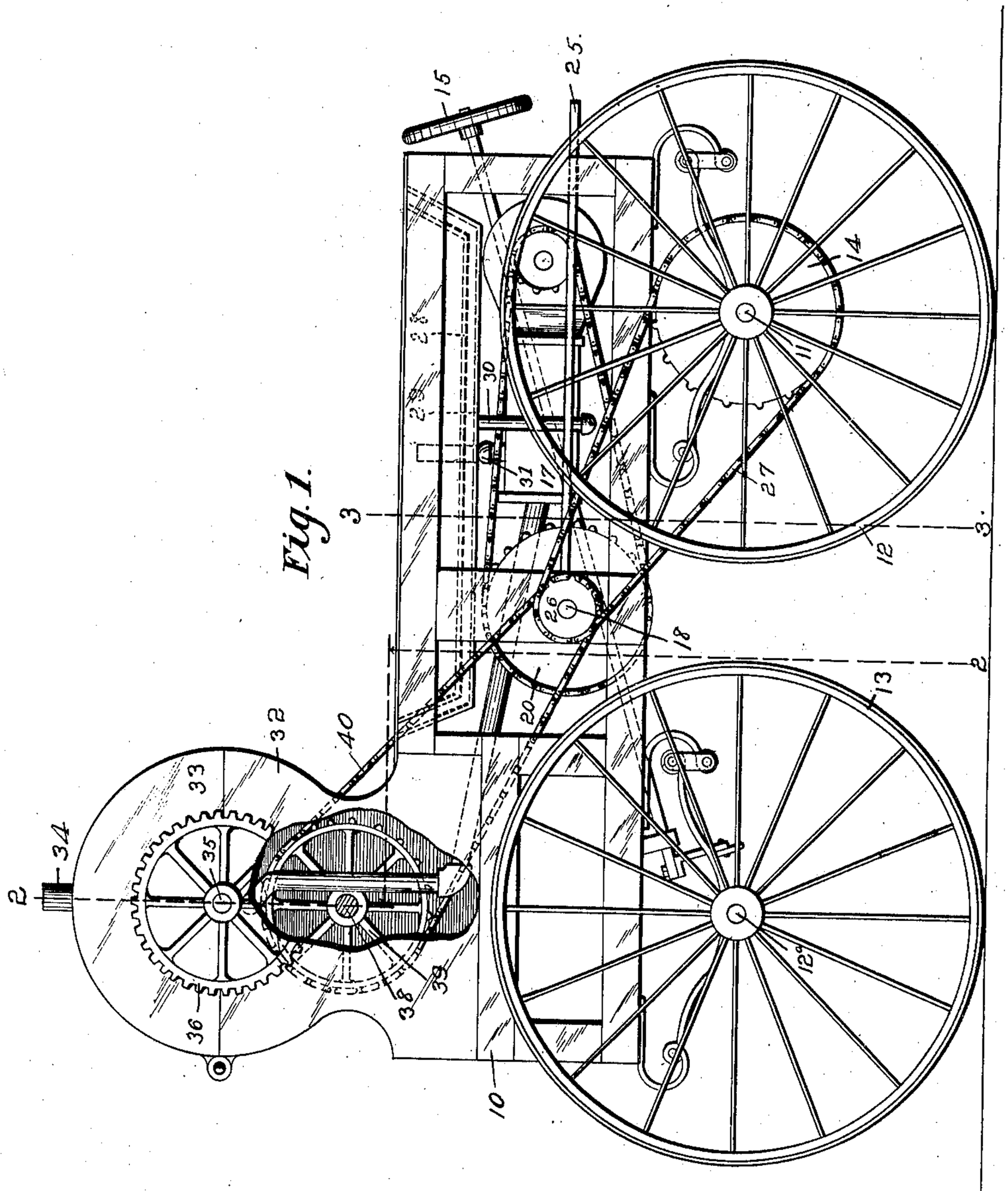
APPLICATION FILED JAN. 27, 1908.

976,424.

Patented Nov. 22, 1910.

3 SHEETS—SHEET 1.

Fig. 1.



Witnesses.

F. C. Dahlberg

A. G. Hagué

Inventor:

Iver R. Anderson.

by Irwin & Lane Atty's.

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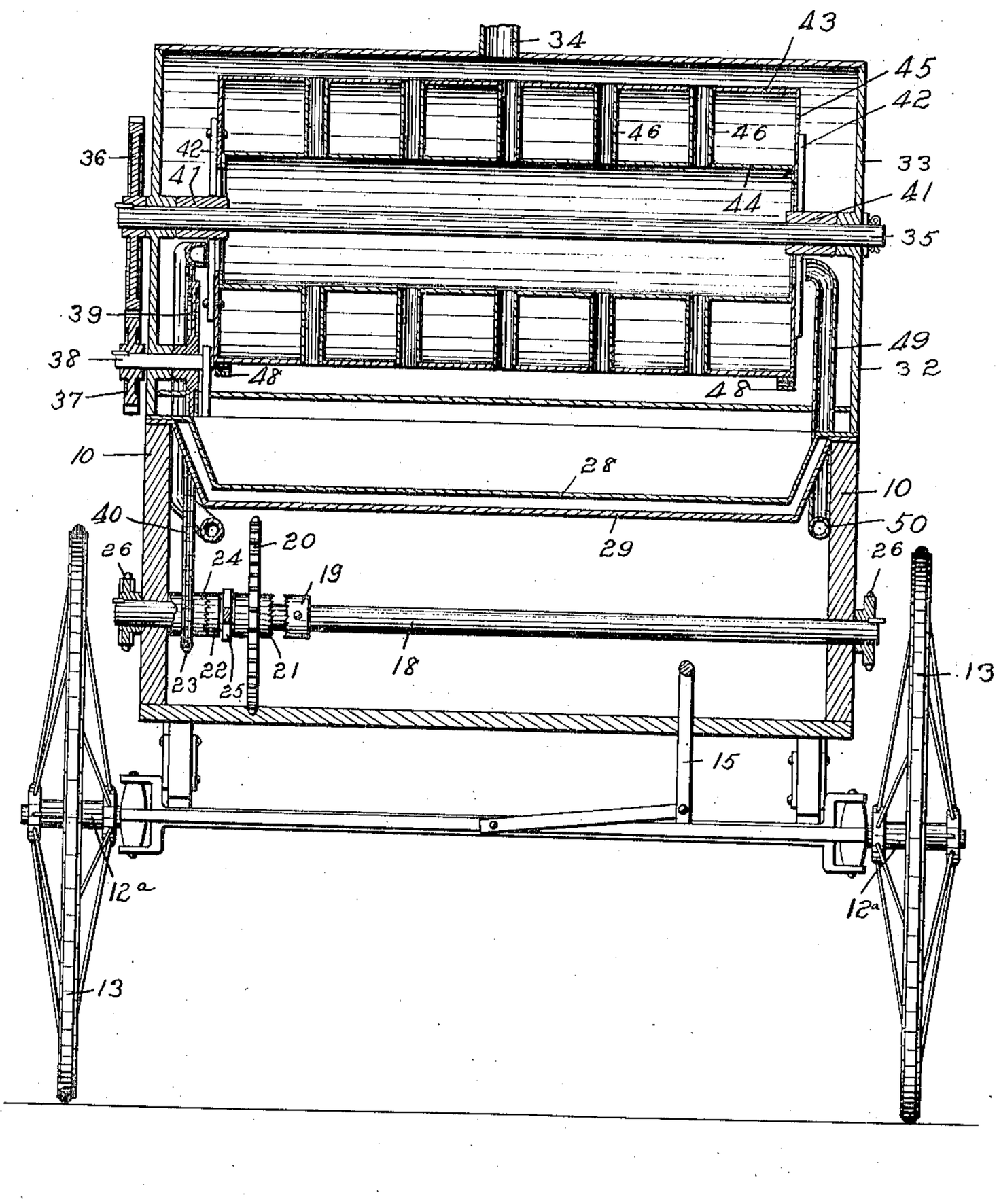
3 SHEETS—SHEET 2.

Fig. 2.



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3 SHEETS—SHEET 3.

Fig. 4.

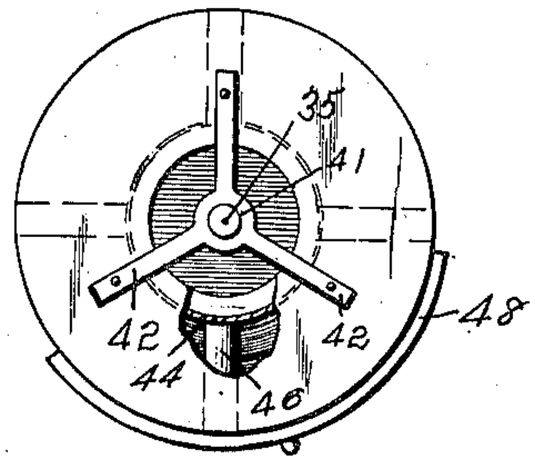
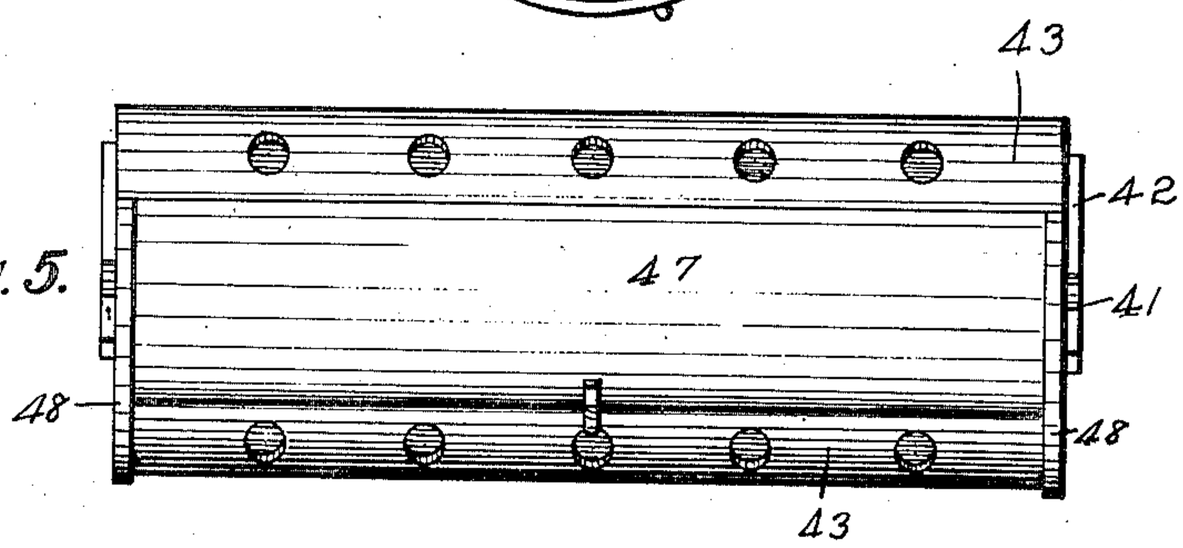


Fig. 5.



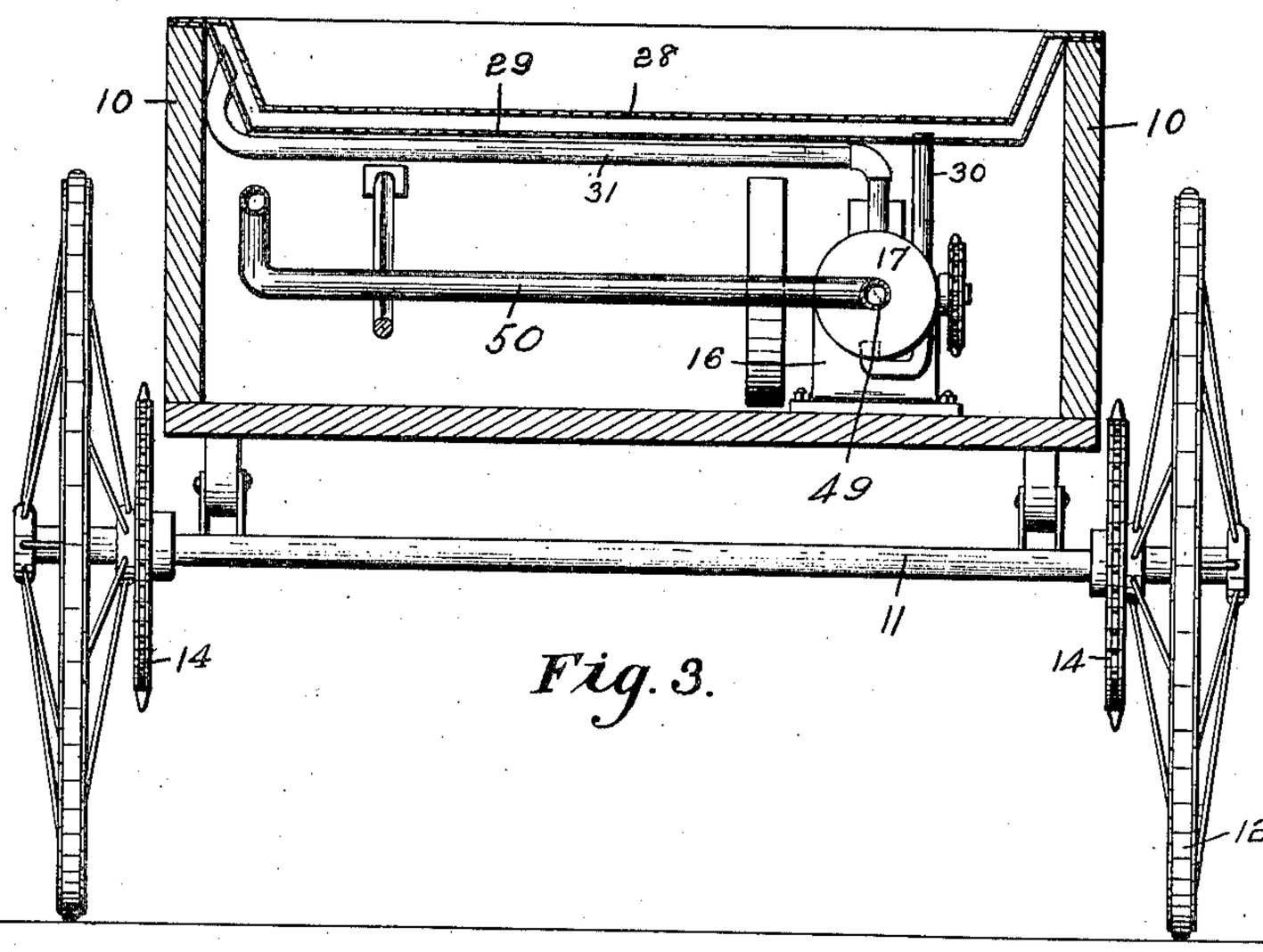


Fig. 3.

Witnesses.

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UNITED STATES PATENT OFFICE.

IVER R. ANDERSON, OF DES MOINES, IOWA, ASSIGNOR TO R. O. STUTSMAN COMPANY, OF DES MOINES, IOWA, A CORPORATION OF IOWA.

PEANUT-ROASTER.

976,424. Specification of Letters Patent. Patented Nov. 22, 1910.

Application filed January 27, 1908. Serial No. 412,768.

To all whom it may concern:

Be it known that I, IVER R. ANDERSON, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Peanut-Roaster, of which the following is a specification.

The objects of my invention are to provide a peanut roaster in which an internal combustion engine is provided, which engine may be used for propelling the peanut roaster, or for rotating the roasting cylinder, and in which the heated products of combustion from the engine are utilized for the purpose of heating or cooking peanuts or other articles.

A further object is to provide means whereby said products of combustion are so distributed as to utilize their heat to its maximum efficiency without having the gases thereof come in direct contact with the peanuts or other articles being cooked.

A further object is to provide a warming pan for peanuts or similar articles, which pan is so arranged and connected with the water jacket of the engine, as to be heated by the water surrounding the engine.

A further object is to provide a simple, durable and inexpensive roasting cylinder especially designed for use in connection with a device of this class, in which the heat is supplied by the exhaust from an internal combustion engine.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of the complete device embodying my invention, with parts broken away to show certain details of construction. Fig. 2 shows a vertical sectional view on the line 2—2 of Fig. 1. Fig. 3 shows a vertical sectional view on the line 3—3 of Fig. 1. Fig. 4 shows an end view of the roasting cylinder, and Fig. 5 shows a side view of same.

Referring to the accompanying drawings, I have used the reference numeral 10 to indicate the frame of the device. This frame is supported upon a rear axle 11 having the driving wheels 12 fixed thereto, and a forward or steering axle 12ª having the wheels 13 thereon.

Mounted on the rear axle 11 are two sprocket wheels 14 for driving same, and connected with the forward axle is a steering device 15 for guiding same. These parts are all of the ordinary construction, and of themselves form no part of my present invention, and hence are not herein specifically illustrated and described.

Mounted within the body portion of the frame is an internal combustion engine 16 of ordinary construction, the cylinder of which is surrounded by a water jacket 17, also of the ordinary kind. A shaft 18 is rotatably mounted in the frame, and is provided with a clutch member 19 fixed thereto. A sprocket wheel 20 is loosely mounted thereon, and having at one end a clutch member 21 to mate with the clutch member 19, and on its other end a clutch member 22. A smaller sprocket wheel 23 is rotatably mounted on the shaft 18 and is provided with a clutch member 24 to mate with the clutch member 22. A lever 25 is provided for sliding the sprocket wheel 20 so that the clutch members thereon may move into engagement with other mating clutch members. When the sprocket wheel 20 is moved into engagement with the clutch member 19, then the shaft 18 will be rotated, and when it is moved into engagement with the clutch member 24, the sprocket wheel 23 will be rotated and the shaft 18 will be stationary.

On the ends of the shaft 18 are the sprocket wheels 26, each of which is connected by a chain 27 with the sprocket wheels 14 on the driving axle.

Mounted in the top of the body portion of the frame is a warming pan formed of an upper layer 28 and a lower layer 29 spaced apart to form a water chamber between them. This water chamber is connected with the water jacket of the engine by means of a pipe 30 communicating between the bottom of the tank and the bottom of the water jacket, and a pipe 31 communicating between the upper portion of the water chamber of the warming pan, and the top portion of the water jacket, as clearly shown in Fig. 3. By this means, the heated water in the jacket will rise through the pipe 31 and heat the warming pan, and as the water

cools in the warming pan, it will descend through the pipe 30 to the bottom of the water jacket.

At the forward end of the frame is a cylindrical roasting casing comprising a lower stationary part 32 and a hinged cover 33 thereon. This casing is provided at its top with a discharge pipe 34. Detachably mounted in the casing is a shaft 35 on which the roasting cylinder hereinafter described is mounted. This shaft is provided at one end with a pinion 36. Said pinion is driven by means of a small pinion 37 in mesh with it, and mounted upon a short shaft 38. This shaft 38 is driven by means of a sprocket wheel 39 fixed to the shaft 38, and connected by a sprocket chain 40 with the sprocket wheel 23, as clearly shown in Fig. 2. The roasting cylinder comprises two hubs 41 fixed to the shaft 35. Each hub is provided with a spider 42 designed to support the roasting cylinder. The roasting cylinder proper is formed of an outer cylinder 43 and an inner cylinder 44 spaced apart from each other. The cylinder heads 45 are provided to cover the space between the cylinders, said cylinder heads however, are open at the ends of the inner cylinder 44. I have also provided a series of rows of open-ended tubes 46 leading from the interior of the inner cylinder 44 to the exterior of the outer cylinder. The chamber between the inner and outer cylinders is designed for the reception of peanuts or other articles to be roasted or cooked, and I have provided for attaining access to this chamber as follows: The outer cylinder 43 is provided with a longitudinal opening in one side, which opening is normally covered by means of a segmental slide 47. This slide operates in tracks 48 formed for it on the stationary part of the outer cylinder. The opening in the outer cylinder is arranged between two of the rows of tubes 46, as shown in Fig. 5.

The reference numeral 49 indicates the exhaust pipe of the engine. This exhaust pipe is provided with a branch 50, and both the pipe and its branch are extended to points adjacent to the opposite ends of the inner cylinder 44, as clearly shown in Fig. 2, so that the discharge from the engine will pass through the ends of the inner cylinder 44 and into said cylinder, and then out through the tubes 46 to the space between the outer cylinder and the casing 32 and 33, and it will then finally escape through the discharge pipe 34.

In practical use, and assuming that it is desired to transport the machine, then the operator starts the engine, and throws the lever 25 to position with the clutch 21 in engagement with the clutch 19. In this way, the engine will propel the machine, and the operator may steer it by the steering device 15. When it is desired to roast peanuts, the operator manipulates the lever 25 to throw the clutch 22 into engagement with the clutch 24, whereupon the roasting cylinder will be rotated. The exhaust from the engine will pass into the roasting cylinder, and the peanuts contained therein will be subjected to heat from the exhaust pipes. Furthermore, the warming pan will be kept warm by means of the water that is used to cool the engine, and articles may be stored therein, that it is desired to keep warm. Obviously, none of the gases arising from the products of combustion from the engine will come in contact with the peanuts or other articles being cooked. When it is desired to have access to the interior of the roasting cylinder, the operator elevates the cover 13 and bodily removes the shaft 35 with the roasting cylinder thereon, then the slide 47 is withdrawn, and the entire contents of the roasting cylinder may be easily discharged, and the cylinder be refilled.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is—

1. In a device of the class described, the combination of a supporting frame, an engine, a compartment for receiving articles to be roasted, and a heater for said compartment comprising a heat containing receptacle within said compartment having means communicating with it for conducting the heat outside of the roasting compartment and also having means for conducting the exhaust from said engine to said heat receptacle whereby the heat from the engine exhaust may be discharged into said heat receptacle and the articles to be roasted may be contained between the heat receptacle and the interior of the compartment, for the purposes stated.

2. In a device of the class described, the combination of a supporting frame, an engine, a compartment for receiving articles to be roasted, and a heater for said compartment comprising a heat containing receptacle within said compartment having means communicating with it for conducting the heat outside of the roasting compartment and also having means for conducting the exhaust from said engine to said heat receptacle whereby the heat from the engine exhaust may be discharged into said heat receptacle and the articles to be roasted may be contained between the heat receptacle and the interior of the compartment, supporting wheels for said frame, and means for gearing said engine to said supporting wheels for advancing the frame.

3. In a device of the class described, the combination of a frame, an engine, a chamber for receiving articles to be roasted, a compartment on the interior of said chamber separated from the chamber, a casing encircling the casing surrounding the roast-

ing chamber, and means for conducting the exhaust from the engine into said inner compartment, and means for conducting heat from said inner compartment to the compartment surrounding the roasting chamber.

4. In a device of the class described, the combination of a supporting frame, an engine, a compartment for receiving articles to be roasted, and a heater for said compartment comprising a heat containing receptacle within said compartment having means communicating with it for conducting the heat outside of the roasting compartment and also having means for conducting the exhaust from said engine to said heat receptacle whereby the heat from the engine exhaust may be discharged into said heat receptacle and the articles to be roasted may be contained between the heat containing receptacle and the interior of the compartment, and means operated by the engine for rotating said roasting compartment.

5. In a device of the class described, the combination of a frame, an engine, a compartment for receiving articles to be roasted, said compartment having an inner chamber separated from the articles to be roasted, means for conducting the exhaust from said engine to said inner chamber, and means operated by the engine for rotating the roasting chamber.

6. In a device of the class described, the combination of a frame, an engine, a chamber for receiving articles to be roasted, a compartment on the interior of said chamber separated from the chamber, a casing encircling the casing surrounding the roasting chamber, means for conducting the exhaust from the engine into said inner compartment, means for conducting heat from said inner compartment to the compartment surrounding the roasting chamber, and means operated by the engine for rotating the roasting chamber.

7. In a device of the class described, the combination of a frame, an engine, a casing, a roasting chamber comprising an inner and an outer cylinder spaced apart to form a roasting chamber between them, means for closing the ends of the roasting chamber, the ends of the inner cylinder being open, tubes extended through the inner and outer cylinders, and pipes communicating between the exhaust port of the engine and the ends of the inner cylinder.

8. In a device of the class described, the combination of a frame, an engine, a casing, a roasting chamber comprising an inner and an outer cylinder spaced apart to form a roasting chamber between them, means for closing the ends of the roasting chamber, the ends of the inner cylinder being open, tubes extended through the inner and outer cylinders, and pipes communicating between the exhaust port of the engine and the ends of the inner cylinder, said outer cylinder being formed with a longitudinal opening between said tubes, and a slide for covering said opening.

9. In a device of the class described, the combination of a frame, an internal combustion engine mounted thereon, a casing mounted on the frame and having a hinged cover, a shaft detachably mounted in the casing, a pinion on said shaft, a pinion mounted in the casing and in mesh with the pinion on the shaft, means for driving the latter pinion by power from the engine, a roasting chamber comprising an inner and an outer cylinder spaced apart, means for supporting said cylinders on said shaft, heads for closing the ends of the cylinders between the inner and outer ones, said heads having openings therein leading to the inner cylinder, a number of rows of tubes extended through said cylinders, means for providing access to the spaces between the cylinders, a pipe connected with the exhaust port of the engine, and extended to a point adjacent to one open end of the inner cylinder, and a branch pipe extended to a point adjacent to the other end of the inner cylinder, both being designed to discharge into the inner cylinder.

10. In a device of the class described, the combination of a frame, a roasting chamber, a warming pan, supporting wheels on the frame, an engine, means operated by the engine for turning the supporting wheels, means for conducting the exhaust from the engine to heat the roasting chamber, a water jacket surrounding the engine, and means for providing communication between the water jacket and the warming pan.

11. In a device of the class described, the combination of a frame, supporting wheels for the frame, an internal combustion engine mounted in the frame, a rotatable roasting chamber, a gearing device for driving the supporting wheels by power from the engine, a gearing device for driving the rotatable roasting chamber by power from the engine, means for controlling said gearing devices, an inner chamber for the roasting chamber, said inner chamber having outlet openings therein, and a pipe leading from the exhaust port of the internal combustion engine to discharge into said inner chamber of the roasting cylinder, for the purposes stated.

Des Moines, Iowa Dec. 6, 1907.

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Witnesses:
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RALPH ORWIG.