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BRAZIER FOR STOVES POWERED BY SOLID FUEL

(57) A brazier (1) for stoves powered by solid fuel, comprising a container (10) configured to contain the fuel, provided with a bottom portion (28) that is substantially concave and affected with a distribution of through holes (32). The brazier (1) also comprises a support (11) configured to house said container (10); the container (10) and the support (11) both consisting of respective portions made of metal sheet (12, 13, 28, 29, 30), suitably cut and/or bent, or stamped and mutually connected in a permanent manner by welding.

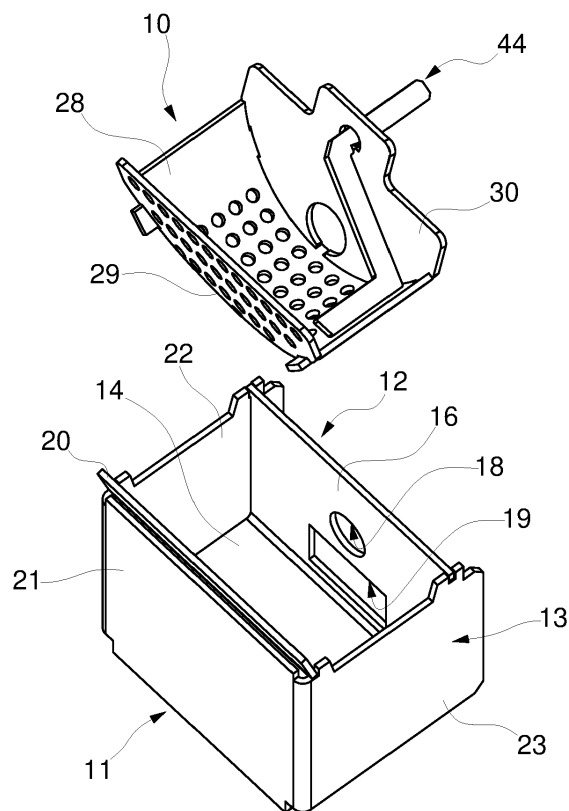


FIG. 4

Description

TECHNICAL FIELD OF THE INVENTION

[0001] The present invention relates to a brazier for stoves powered by solid fuel.

FIELD OF THE PRIOR ART

[0002] The stoves powered by solid fuels, in particular pellets but also wood chips, cereals, and plant discards in general, comprise a stove body, which houses a burner.

[0003] In addition, fuel storage space is provided for, which can be situated outside or within the same stove body: the fuel, picked up from the aforesaid space usually by a screw conveyor, or the like, is gradually fed inside the burner.

[0004] The burner of the stove comprises a fuel collection tray, more commonly known as brazier, provided with a perforated bottom, through which the comburent air enters into the combustion chamber.

[0005] The brazier usually has square, rectangular or cylindrical shape, and is equipped with vertical walls that delimit the brazier, and serve for containing the ashes.

[0006] In a burner solution proposed by the same applicant, and described in the European patent application No. EP 2 226 558 B1, the brazier comprises a substantially rectangular body provided, at the center line, with a portion distinguished by a concavity that is directed upward during use.

[0007] Such portion is equipped with through holes at the entire extension thereof, through which the primary air flows that is necessary for the combustion.

[0008] The aforesaid substantially rectangular body is normally attained by means of a casting of cast iron, and has a rather complex shape: indeed, it is provided with all the necessary perforations and channels for the passage of the combustion air, as well as with lateral edges and abutments shaped for the correct installation within the stove body.

[0009] In addition, the brazier described in this document comprises lateral elements, arranged at the sides of the concave portion, and made of metal sheet; such lateral elements are substantially V-shaped, with apex directed upward, and are fixed to the substantially rectangular body by means of screws.

[0010] Such lateral elements are provided with holes at the face thereof directed towards the concave portion, and in turn they surmount the lateral portions of the substantially rectangular body, affected with further through holes.

[0011] In practice, such V-shaped lateral elements act as lateral distributor elements for the secondary air, necessary for the combustion process.

[0012] As can be comprised, therefore, this brazier of known type is rather structurally complex and expensive, since it requires various components for the assembly

thereof.

[0013] This structural complexity also involves a certain difficulty and diligence in executing the operations of cleaning and maintenance.

[0014] In addition, it is underlined that the brazier described in the aforesaid document EP 2 226 558 B1 comprises a motorized spatula, actuated to carry out an oscillating movement, which has the function of keeping free the holes of the central concave portion of the brazier.

[0015] The aforesaid spatula, which has a substantially double elbow shape, comprises two opposite terminal pins, which are rotatably supported at suitable seats, provided along two lateral walls of the substantially rectangular body of the brazier.

[0016] The spatula is then blocked in the operating position by further walls (these also made, for example, of cast iron), which surmount the substantially rectangular element.

[0017] As a consequence thereof, the spatula is not normally removable, except by disassembly of the entire brazier, with clear waste of time: indeed, the substitution of the spatula requires the disassembly of the stud bolts that fix the assembly consisting of burner, spatula and support heads.

OBJECTS OF THE INVENTION

[0018] The technical task of the present invention is therefore that of improving the state of the art in the field of stoves powered by solid fuel.

[0019] In the scope of such technical task, one object of the present invention is to overcome the previously lamented drawbacks.

[0020] Another object of the present invention is to implement a brazier for stoves powered by solid fuel, structurally simpler than the braziers of known type.

[0021] Still another object of the present invention is to attain a brazier for stoves powered by solid fuel, structurally less expensive than the braziers of known type.

[0022] A further object of the present invention is to provide a brazier for stoves powered by solid fuel, more practical and functional from the standpoint of the use.

[0023] Another object of the present invention is to implement a brazier for stoves powered by solid fuel, more practical and functional also from the standpoint of maintenance and cleaning.

[0024] This task and these objects are achieved by the brazier for stoves powered by solid fuel, according to the enclosed claim 1.

[0025] The brazier comprises a container configured to contain the fuel, provided with a bottom portion that is substantially concave and affected with a distribution of through holes. According to the invention, the brazier also comprises a support, configured to house the container.

[0026] The container and the support both consisting of respective portions made of metal sheet, suitably cut and/or bent, or alternatively stamped, mutually connect-

ed in a permanent manner by welding.

[0027] This solution is particularly simple and inexpensive from the structural standpoint.

[0028] In a further alternative (not illustrated), the container and the support both consist of respective portions made of metal sheet, suitably stamped (e.g. drawn).

[0029] The solution is also more practical, functional, light and manageable with regard to the cleaning and maintenance, also with particular reference to the possible substitution of the spatula, which can be directly carried out by the user without the specialized intervention of technicians of the field.

[0030] Such task and such objects are also achieved by the method for manufacturing a brazier for stoves with solid fuel according to that provided in the enclosed claim 11.

[0031] The dependent claims refer to preferred and advantageous embodiments of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0032] The characteristics of the invention will be better understood by each man skilled in the art from the following description and from the enclosed drawing tables, given as a nonlimiting example, in which:

figure 1 is an axonometric view of a stove powered by solid fuel, with several parts removed for better clarity, comprising a brazier according to the present invention;

figure 2 is an axonometric view, from a different angle, of the stove of figure 1;

figure 3 is an exploded axonometric view of the stove of figures 1,2;

figure 4 is an exploded axonometric view of the brazier according to the invention;

figure 5 is an axonometric view, from a different angle, of the brazier;

figure 6 is an axonometric view of the spatula for cleaning the brazier;

figure 7 is an exploded axonometric view of the container of the brazier;

figure 8 is an exploded axonometric view of the support of the brazier;

figure 9 is an exploded side view of the brazier;

figure 10 is a sectioned side view of the brazier;

figure 11 is a detailed side view of the brazier, according to another embodiment of the invention;

figure 12 is a top view of the brazier;

figure 13 is a sectioned front view of the brazier;

figure 14 is a sectioned front view of the brazier, according to another embodiment of the invention;

figure 15 is a top view of the brazier, according to still another embodiment of the invention

DETAILED DESCRIPTION OF THE INVENTION

[0033] With reference to the enclosed figure 1, S over-

all indicates a stove powered by solid fuel, comprising a brazier according to the present invention, the latter indicated overall with 1.

[0034] The stove S comprises a stove body 2; the stove body 2 defines, at its own interior, a combustion chamber 3 which houses the brazier 1.

[0035] The brazier 1 is associated with a drawer 4 for collecting the ashes.

[0036] The stove S also comprises means 5 for transferring the pellet from a storage space in which it is collected (not represented in the figures, for the sake of simplicity) towards the brazier 1.

[0037] The transfer means 5 can comprise, for example, an Archimedes' screw 6, or the like. The transfer means 5 communicate with an opening 7 for discharging the pellet within the combustion chamber 3, and hence within the brazier 1.

[0038] At the base of the stove body 2, ventilation means 8 are additionally provided for.

[0039] The ventilation means 8 provide to send the comburent air within the combustion chamber 3, through feed pipes.

[0040] The stove S also comprises ignition means 9, for triggering the combustion; the ignition means 9 can comprise, for example, a glow plug, or the like, placed in communication with the combustion chamber 8 (in particular, at the brazier 1, as better described herein below).

[0041] According to one aspect of the invention, the brazier 1 comprises a container 10, configured to contain the fuel.

[0042] In addition, the brazier 1 comprises a support 11.

[0043] The support 11 is configured to house the aforesaid container 10.

[0044] According to the invention, the container 10 and the support 11 both consist of respective portions made of metal sheet, suitably cut and/or bent, or alternatively stamped, and mutually connected in a permanent manner by welding.

[0045] According to a further alternative embodiment, the container 10 and the support 11 both consist of respective portions made of metal sheet, suitably stamped (e.g. drawn).

[0046] As will be more evident hereinbelow, these solutions are structurally simpler and less expensive than the state of the art.

[0047] In the course of the description, each reference to connotations such as front, rear, lateral etc., used for defining specific parts, are entirely conventional, and refer to the positioning of the brazier 1 within the stove S; for this reason, there are not to be intended in a limiting sense.

[0048] The support 11 has substantially box-like shape (open at the side that is the upper side during use), so as to contain the container 10.

[0049] According to one version of the invention, the support 11 in turn comprises a first portion 12 of bent metal sheet and a second portion 13 of bent metal sheet,

mutually connected in a permanent manner by means of welding.

[0050] The first portion 12 is substantially U-shaped; this comprises, more particularly, a bottom 14, a front wall 15 and a rear wall 16 (opposite the front wall 15).

[0051] The rear wall 16 of the first portion 12 comprises, along the respective lateral edges and at the top, two opposite first teeth 17.

[0052] In addition, the rear wall 16 of the first portion 12 comprises a first window 18; the first window 18 is circular, or substantially circular.

[0053] The rear wall 16 also comprises a second window 19; the second window 19 is rectangular, or substantially rectangular.

[0054] The second window 19 is situated below the first window 17, with reference to the use position of the brazier 1.

[0055] The first window 18 and the second window 19 can be used for conveying air into the brazier 1, and/or for placing the ignition means 9 in communication with the brazier 1.

[0056] The front wall 15 of the first portion 12 comprises, along the upper edge thereof, a strip 20; the strip 20 has width greater than that of the front wall 15; in addition, the strip 20 lies on a plane tilted by a certain angle with respect to that on which the aforesaid front wall 15 lies.

[0057] The second portion 13 is also substantially U-shaped; the second portion 13 comprises a front wall 21, and two lateral walls 22, 23.

[0058] Each of the lateral walls 22, 23 comprises, along the upper edge 24 thereof, a second tooth 25 and a third tooth 26 (figure 9).

[0059] The second tooth 25 and the third tooth 26 are provided at the ends of the upper edge 24 of each lateral wall 22, 23.

[0060] In particular, the third tooth 26 has greater width than the second tooth 25, and comprises a recess 27.

[0061] In assembled configuration, the first portion 12 and the second portion 13 - as shown, for example, in figure 8 - are oriented according to respective planes that are perpendicular to each other (i.e. with reference to the use position, the first portion 12 is an upright "U", while the second portion 13 is a laid-down "U").

[0062] More in detail, the first teeth 17 of the first portion 12 are engaged within the respective recesses 27 of the lateral walls 22, 23 of the second portion 13; in addition, the ends of the strip 20 are engaged between the second teeth 25 of the lateral walls 22, 23 and the front wall 21, which projects above the lateral walls 22, 23.

[0063] This mode of permanent joining between the two portions 12, 13 allows obtaining the abovementioned shape of a box that is open on the upper part.

[0064] The first portion 12 and the second portion 13 of the support 11 are both attained starting from portions, or sheets, of metal sheet (e.g. of stainless steel) that is bent and cut (e.g. by means of laser cutting, or even by means of stamping or cutting).

[0065] The permanent joining of the first portion 12 with

the second portion 13 is obtained by means of welding.

[0066] The container 10 comprises a bottom portion 28, a front portion 29 and a rear portion 30, mutually connected so as to achieve a cradle-like conformation, suitable for containing the solid fuel.

[0067] The bottom portion 28 is curved; more in detail, when observed in section (see for example figure 13) this is substantially curved according to a circumference arc. During use, the concavity of the bottom portion 28 is directed upward.

[0068] In addition, the bottom portion 28 has smaller width at the center line, and greater width at the opposite ends thereof.

[0069] In order to obtain this result, the lateral edges 31 of the bottom portion 28 are cut according to respective circumference arcs, with opposite curvature (figure 12).

[0070] The bottom portion 28 is affected with a distribution of through holes 32.

[0071] For example, the through holes 32 can be distributed in a regular manner, along parallel rows, and mainly in the central zone of the bottom portion 28.

[0072] The bottom portion 28 also comprises, along the lateral edges 31 thereof, reliefs 33. The reliefs 33 are arranged mirrored along the two lateral edges 31; for example, each lateral edge 31 comprises three respective reliefs 33, two-by-two opposite.

[0073] The front portion 29 is substantially shaped with circular segment.

[0074] The front portion 29 comprises a first lower edge 34, with circumference arc.

[0075] The front portion 29 comprises, along the aforesaid first lower edge 34, first notches 35 (e.g. three first notches 35).

[0076] The front portion 29 comprises a respective plurality of further through front holes 29a; the front holes 29a facilitate the circulation of air within the brazier 1.

[0077] In particular, the air circulates through the front holes 29a, moving into the interspace defined between the container 10 and the support 11, which thus constitutes a duct for the front holes 29a themselves.

[0078] The number and the dimensions of the front holes 29a (and also their specific positions) can be varied in relation to the requested combustion power.

[0079] In one version of the invention, the front holes 29a can be selectively closed/plugged in order to modify the circulating air flow.

[0080] The rear portion 30 is also shaped substantially as a circular segment, with shape similar to that of the front portion 29.

[0081] The rear portion 30 comprises a second lower edge 36, shaped with circumference arc. The rear portion 30 comprises, along the aforesaid second lower edge 36, second notches 37 (e.g. three second notches 37).

[0082] In particular, the second notch 37 provided centrally is widened, towards the interior of the aforesaid rear portion 30, shaping a kind of circular opening 37a.

[0083] In addition, the upper contour 38 of the rear por-

tion 30 shapes a central flap 39; the flap 39 has a through seat 40 thereon.

[0084] The contour of the through seat 40 consists of joining a first contour 41 and a second contour 42, both shaped with circumference arc, in which the first contour 41 has diameter smaller than that of the second contour 42 (see figures 7, 13).

[0085] In assembled configuration of the container 10, the reliefs 33 of the bottom portion 28 are engaged, respectively, in the first notches 35 of the front portion 29 and in the second notches of the rear portion 37.

[0086] Also the rear portion 30 could be provided with respective air circulation holes (not illustrated).

[0087] Also in this, the interspace defined between the container 10 and the support 11 constitutes a duct for the holes of the rear portion 30 (if they are provided).

[0088] The bottom portion 28, the front portion 29 and the rear portion 30 are made starting from portions, or sheets, of metal sheet (e.g. of stainless steel) that are cut and bent (in this case, only the bottom portion 28 is bent), or, alternatively, stamped.

[0089] The permanent joining of the bottom portion 28 with the front portion 29 and the rear portion 30 is obtained by means of welding.

[0090] As clearly illustrated in figure 9 or in figure 10, the container 10 - observed on the side - has a shape that is flared and tapered upward (with reference to the placement and use configuration).

[0091] This shape allows the easy insertion of the container 10 within the support 11.

[0092] More particularly - observing the brazier 1 on the side - the top of the container 10 is wider than the top of the support 11, such that the container 10 is abutted against the edge of the opening of the support 11 without completely penetrating therein, also facilitated by the tilt of the strip 20; in other words, the container 10 is situated at a certain distance from the bottom 14 of the support 11, so as to define and delimit an internal space 43 between the support 11 and the container 10.

[0093] Such internal space 43 can have the function of facilitating the circulation of the comburent air below the container 10, on which the fuel is fed and deposited.

[0094] In addition, the reliefs 33 of the bottom portion 28 act as abutments, respectively, against the front wall 29 and the rear wall 30 of the support 11, so as to obtain a stable coupling between the support 11 and the container 10.

[0095] In one embodiment of the invention, the container 10 and the support 11 are mutually connected in a permanent manner, by means of welding.

[0096] In another embodiment of the invention, the container 10 and the support 11 are not constrained in a permanent manner, but rather are mutually associated in a removable manner, with the container 10 simply abutted against the support 11.

[0097] The latter solution can be more advantageous from the standpoint of cleaning the brazier 1.

[0098] According to another aspect of the invention,

the brazier 1 comprises a spatula 44.

[0099] The spatula 44 has the function of keeping clean the through holes 32 of the bottom portion 28 of the container 10.

[0100] As shown, for example, in figure 6, the spatula 44 is substantially S-shaped, according to a broken line consisting of three straight segments.

[0101] More in detail, the spatula 44 comprises a first segment 45, adapted to be connected to actuation means 46 provided in the stove S (for example a crank gear, or a mechanism of another type).

[0102] In addition, the spatula comprises a second connection segment 47, and a third segment 48, adapted to brush the surface of the bottom portion 28 in order to clean the through holes 32.

[0103] Also the spatula 44 can be made of steel sheet.

[0104] At the joining zone between the first segment 45 and the second segment 47, the spatula 44 comprises an indentation 49, for coupling with the seat 40 of the rear portion 30. More in detail, in use configuration, the first contour 41 of the seat 40 is engaged in the indentation 49 of the spatula 44.

[0105] The spatula 44 is thus rotatably supported in its rotation, necessary for the cleaning of the surface of the bottom portion 28.

[0106] At the same time, the spatula 44 can be easily extracted from the seat 40, and hence completely removed from the brazier 1, for cleaning and/or maintenance reasons, without having to disassemble parts of the stove S for this purpose.

[0107] More in detail, the spatula 44 can be easily extracted and removed, and possibly substituted, in an easy manner, by removing from the stove S the group comprising the support 11 and the container 10 (which for this reason can be disassembled from the stove S).

[0108] In one embodiment of the invention, the through holes 32 of the bottom portion 28 are attained with greater diameter at the front zone, front during use, of the container 10, since in such zone a greater quantity of fuel is deposited.

[0109] In one embodiment of the invention, illustrated in the detail of figure 11, also the rear wall 16 of the first portion 12 comprises a bent upper edge 50, i.e. tilted with respect to the plane of the same rear wall 16.

[0110] In this manner, therefore, the upper opening of the support 11 has flared shape both at the front and back, so as to facilitate the abutment of the container 10.

[0111] In still another embodiment of the invention, illustrated in the section of figure 14, the bottom portion 28 of the container 10 has the respective ends 51 bent, both with opposite curvature with respect to the concavity of the aforesaid bottom portion 28.

[0112] Such bent ends 51 thus define the respective grooves 52.

[0113] It is thus possible to constrain, via coupling, the container 10 to the support 11: in particular, the upper edges 24 of the lateral walls 22, 23 of the second portion 13 are engaged within the grooves 52 of the bottom por-

tion 28.

[0114] This is therefore an alternative version which proposes a different solution of abutment of the container 10 on the support 11, especially if it is intended to associate the two parts in a removable manner.

[0115] In an alternative version of the invention, the container 10 and the support 11 both consist of respective portions made of metal sheet, suitably stamped.

[0116] More in detail, the container 10 and the support 11 can both consist of a single suitably stamped metal sheet portion, or each of these can consist of multiple portions of metal sheet that are stamped and then assembled, preferably - but not exclusively - by means of welding.

[0117] Another embodiment of the brazier 1 according to the invention is illustrated in figure 15. This embodiment differs from the preceding due to the shape of the spatula 44.

[0118] More in detail, in this embodiment the spatula 44 is substantially U-shaped.

[0119] As in the preceding versions, the spatula 44 comprises a first segment 45, adapted to be connected to actuation means 46 provided in the stove S (e.g. a crank gear, or a mechanism of another type).

[0120] In addition, the spatula comprises a second connection segment 47, and a third segment 48, adapted to brush the surface of the bottom portion 28 in order to clean the through holes 32.

[0121] Different from the preceding version, the spatula 44 also comprises a fourth connection segment 53, and a fifth segment 54, aligned with the first segment 45 rotatably supported by the front portion 29 (for example at a loop made in the latter).

[0122] The segments 45, 46, 47, 53, 54 thus follow each other according to a broken line that is substantially U-shaped.

[0123] This version of the invention provides an improved support for the rotary movement of the spatula 44, while preserving the advantages of the simple easy removal for the purposes of cleaning/maintenance/substitution.

[0124] The mode of use of the brazier 1 according to the invention is, in light of that described above, entirely intuitive.

[0125] The fuel is fed so as to be deposited on the bottom portion 28 of the container 10.

[0126] Once the ignition is carried out through the first window 18, the comburent air is fed so as to cross the support 11, and to brush the fuel deposited on the bottom portion 28.

[0127] If necessary, the spatula 44 is actuated so as to clean the through holes 32 of the bottom portion 28.

[0128] Also forming the object of the present invention is a method for manufacturing a brazier 1 for stoves powered by solid fuel.

[0129] The method according to the invention comprises a step of providing a plurality of portions made of metal sheet 12, 13, 28, 29, 30, suitably cut and/or bent.

[0130] The method also comprises a step of assembling several of the aforesaid portions made of metal sheet 28, 29, 30, so as to obtain a container 10 configured to contain the fuel, provided with a bottom portion 28 that is substantially concave and affected with a distribution of through holes 32.

[0131] The method also comprises a step of assembling other portions made of metal sheet 12, 13 so as to obtain a support 11, configured to house the aforesaid container 10.

[0132] The method also comprises a step of connecting the aforesaid portions made of metal sheet 12, 13 and 28, 29, 30, in a permanent manner, by means of welding, in order to respectively obtain the container 10 and the support 11.

[0133] In one embodiment of the invention of particular practical interest, the brazier 1 manufactured with the method according to the invention possess the previously-described characteristics.

[0134] The invention, thus conceived, allows obtaining important technical advantages.

[0135] The structural solution of the brazier 1 according to the present invention considerably simplifies the manufacturing process, since it is no longer necessary to resort to arduous castings in cast iron.

[0136] In addition, the proposed structural solution renders the process for manufacturing the brazier 1 less expensive.

[0137] The object obtained due to the solution proposed in the present invention is simpler to assemble and to install within the stove S; in addition, it is simpler and more manageable to clean.

[0138] Another important advantage regards the fact that the proposed structural solution allows attaining the brazier with limited sizes with respect to the known solutions, in which it is made of cast iron.

[0139] Indeed, the manufacturing by means of cast iron casting does not allow obtaining through holes with diameter smaller than a certain value.

[0140] Holes with small diameter could be obtained with subsequent perforation processing, which would however render the manufacturing process excessively costly and arduous. With the solution proposed according to the present invention, however, the brazier 1 can be attained with considerably smaller sizes, and with a manufacturing process (which consists of processing parts of metal sheet) that is faster and less expensive overall.

[0141] It is thus seen that the finding achieves the proposed objects.

[0142] The present invention has been described according to preferred embodiments, but equivalent variants can be conceived without departing from the protective scope offered by the following claims.

Claims

1. Brazier (1) for stoves powered by solid fuel, compris-

- ing a container (10) configured to contain the fuel, provided with a substantially concave bottom portion (28), and affected by a distribution of through holes (32), **characterized in that** it further comprises a support (11) configured to house said container (10), said container (10) and said support (11) both consisting of respective portions in metal sheet (12, 13, 28, 29, 30), suitably cut and/or folded, or stamped, and permanently connected to each other by welding.
2. Brazier (1) according to claim 1, comprising a spatula (44) adapted to keep said through holes (32) of said bottom portion (28) clean, said spatula (44) being substantially S-shaped, according to a broken line consisting of three straight segments (45, 46, 47), or substantially U-shaped, according to a broken line consisting of five straight segments (45, 46, 47, 53, 54).
 3. Brazier (1) according to claim 1 or 2, wherein said support (11) has a substantially box-like shape, so as to contain said container (10), said support (11) comprising a first portion (12) of bent metal sheet and a second portion (13) in bent metal sheet, permanently connected to each other by welding.
 4. Brazier (1) according to claim 3, wherein said first portion (12) is substantially U-shaped, and comprises a bottom (14), a front wall (15) and a rear wall (16).
 5. Brazier (1) according to claim 4, wherein said second portion (13) is substantially U-shaped, and comprises a front wall (21), and two side walls (22, 23).
 6. Brazier (1) according to one of the preceding claims, wherein said container (10) comprises said bottom portion (28), a front portion (29) and a rear portion (30), mutually connected so as to achieve a cradle-like conformation, suitable for containing solid fuel, said bottom portion (28) being substantially curved according to a circumference arc, with concavity, in use, facing upwards, said bottom portion (28) further comprising respective lateral edges (31) cut according to respective circumference arcs, with opposite curvatures.
 7. Brazier (1) according to claim 6, wherein said front portion (29) and said rear portion (30) are both substantially shaped as circular segment, said container (10) having a substantially flared and tapered upward configuration, so as to allow an easy insertion of said container (10) inside said support (11).
 8. Brazier (1) according to claim 6 or 7, wherein said front portion (29) of said container (10) comprises a plurality of front through holes (29a), the number, dimensions and positioning of which depend on the combustion power of the stove (S).
 9. Brazier (1) according to claim 8, wherein said rear portion (30) of said container (10) comprises a through seat (40) adapted to rotatably support said spatula (44), and also to allow its easy removal for cleaning and/or maintenance reasons after the disassembly of said support (11) and of said container (10) from the stove (S), the contour of said seat (40) being constituted by the union of a first contour (41) and of a second contour (42), both shaped like an circumference arc, and wherein said first contour (41), able to rotatably support said spatula (44), has a smaller diameter than that of said second contour (42).
 10. Brazier (1) according to one of the preceding claims, wherein said container (10) and said support (11) are permanently connected to each other by welding.
 11. Method for manufacturing a brazier (1) for stoves powered by solid fuel, **characterized in that** it comprises the steps of providing a plurality of sheet metal portions (12, 13, 28, 29, 30), suitably cut and/or folded, or suitably stamped, assembling some of said metal sheet portions (28, 29, 30) so as to obtain a container (10) configured to contain the fuel, provided with a substantially concave bottom portion (28), and affected by a distribution of through holes (32), and further other sheet metal portions (12, 13) so as to obtain a support (11) configured to house said container (10), permanently connecting said sheet metal portions (28, 29, 30 and 12, 13) by welding, to obtain said container (10) and said support (11).
 12. Method according to claim 11, wherein said support (11) has a substantially box-like shape, so as to contain said container (10), said support (11) comprising a first portion (12) of bent metal sheet and a second portion (13), connected to each other by welding.
 13. Method according to claim 12, wherein said first portion (12) is substantially U-shaped, and comprises a bottom (14), a front wall (15) and a rear wall (16).
 14. Method according to claim 13, wherein said second portion (13) is substantially U-shaped, and comprises a front wall (21), and two side walls (22, 23).
 15. Method according to one of claims 11-14, wherein said container (10) comprises said bottom portion (28), a front portion (29) and a rear portion (30), mutually connected so as to achieve a cradle-like conformation, suitable for containing solid fuel.
 16. Method according to claim 15, wherein said bottom

portion (28) is substantially curved according to an arc of circumference, with concavity, in use, facing upwards, said bottom portion (28) comprising respective lateral edges (31) cut according to respective circumference arcs, with opposite curvatures. 5

17. Method according to claim 15, wherein said front portion (29) and said rear portion (30) are both substantially shaped as circular segment. 10

18. Method according to one of claims 15-17, wherein said container (10) has a substantially flared and upwardly tapered configuration, so as to allow the easy insertion of said container (10) inside said support (11). 15

19. Method according to one of claims 11-18, wherein said container (10) and said support (11) are permanently connected to each other by welding. 20

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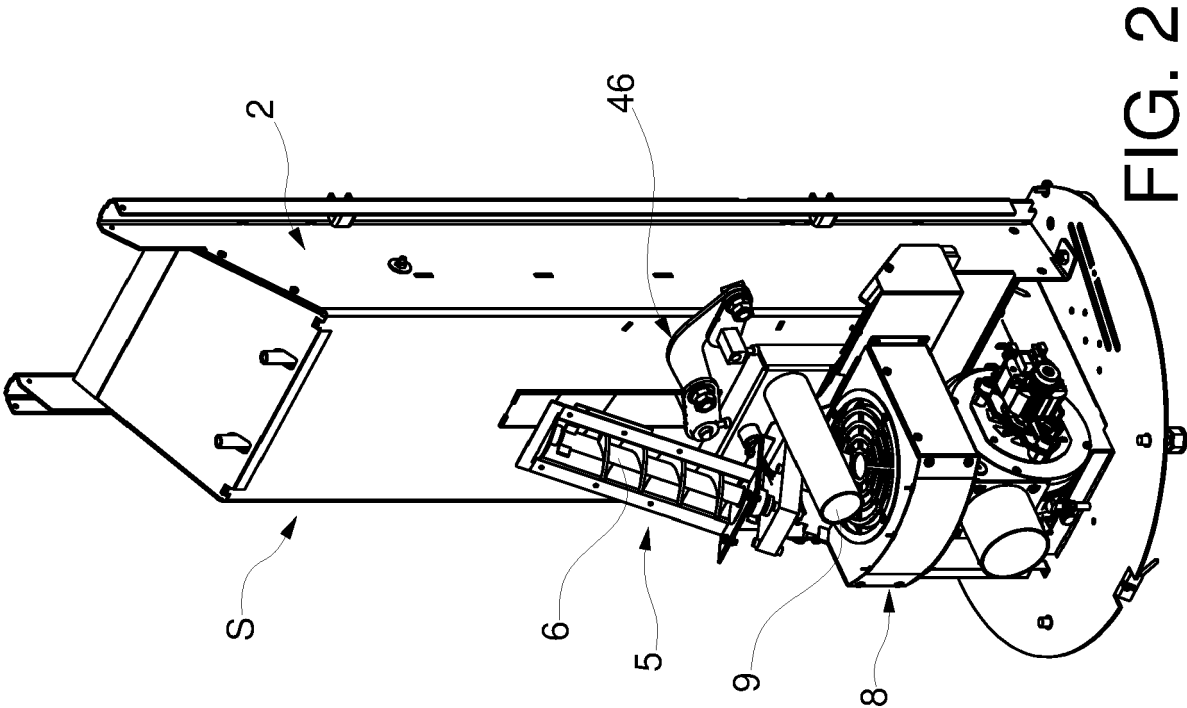


FIG. 2

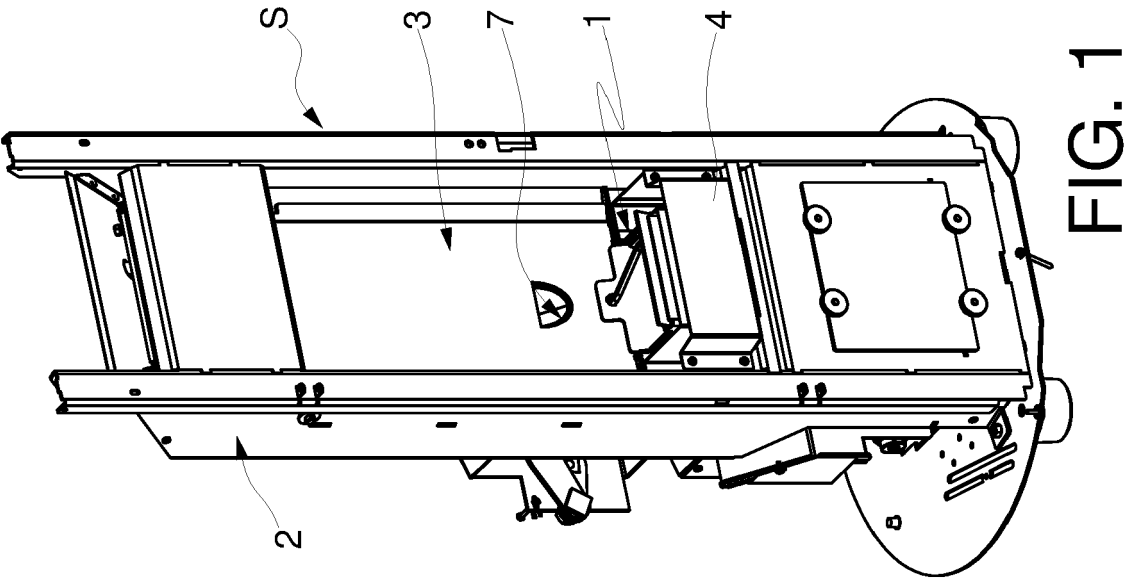


FIG. 1

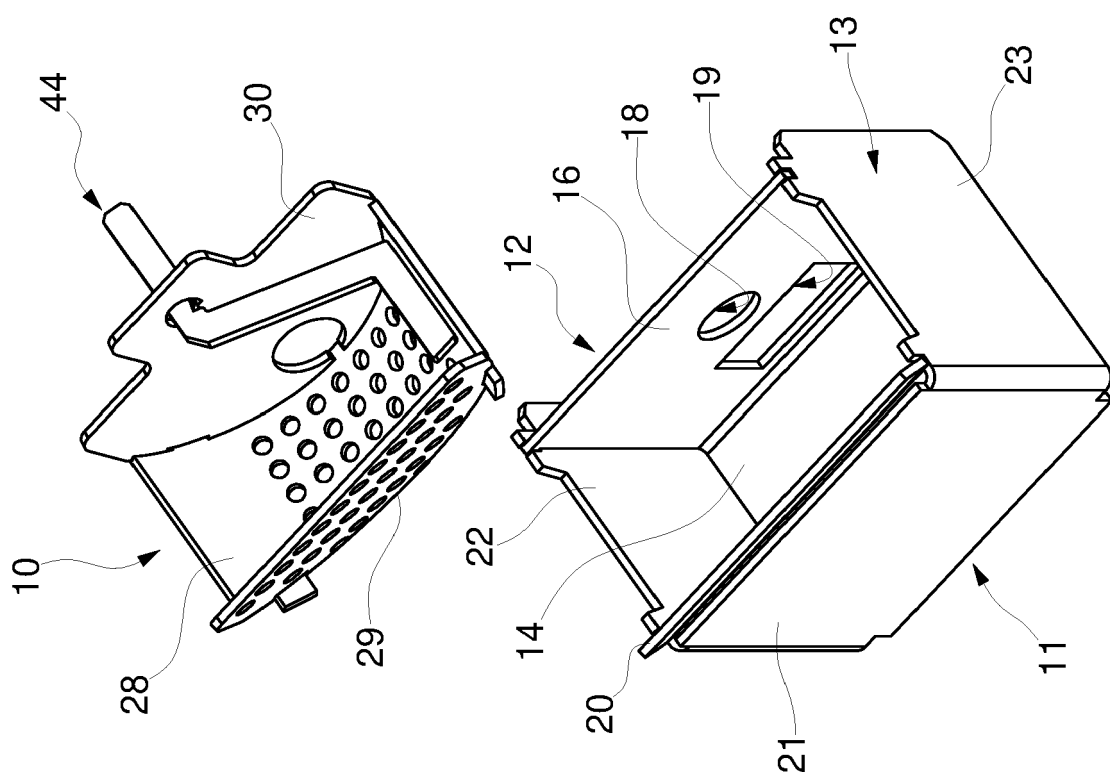


Fig. 4

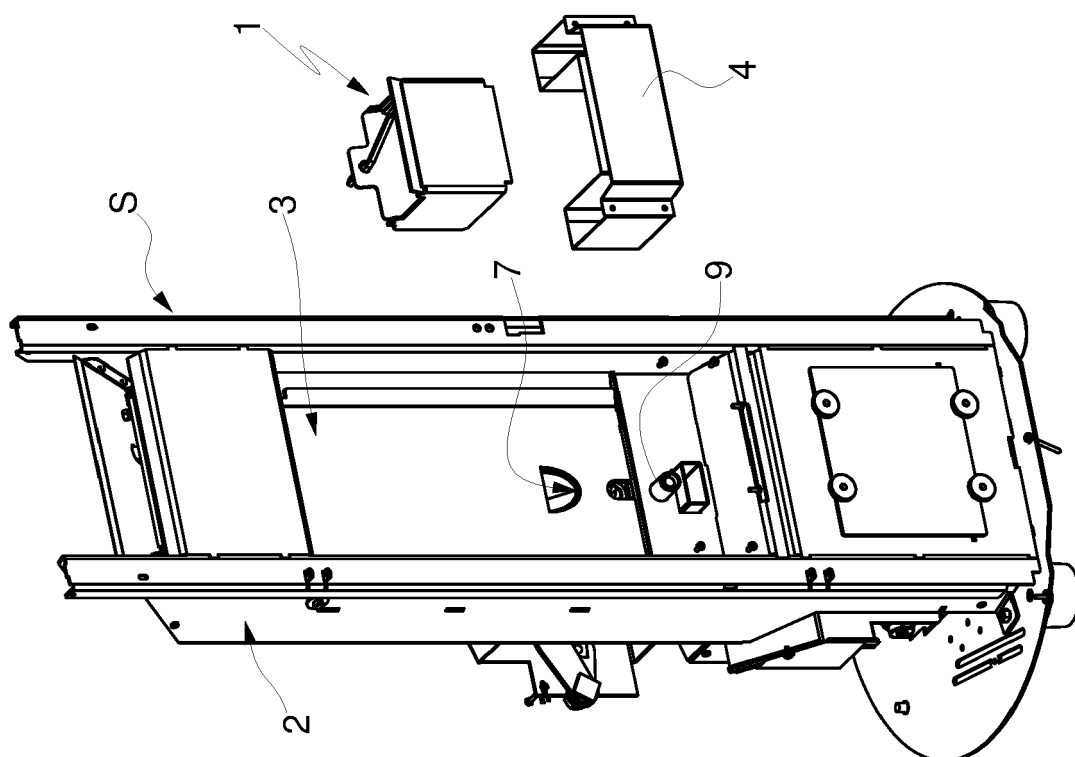


FIG. 3

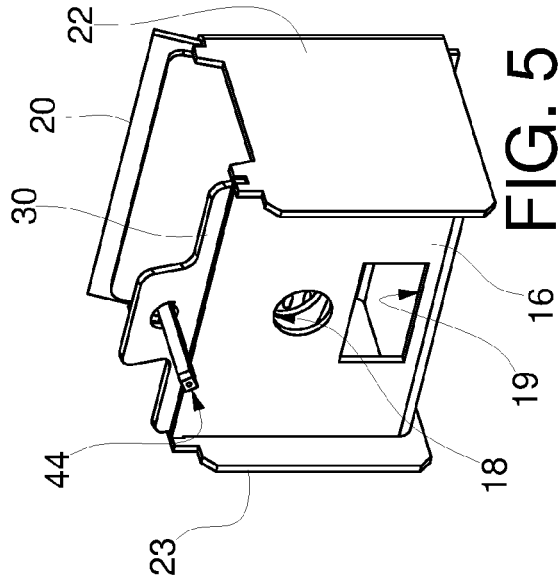


FIG. 5

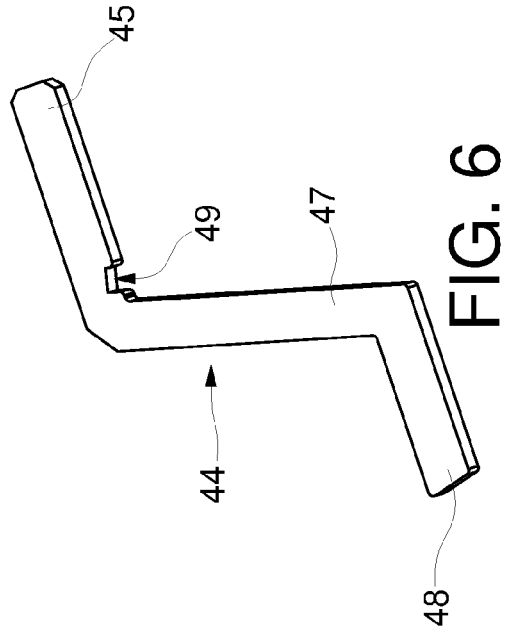


FIG. 6

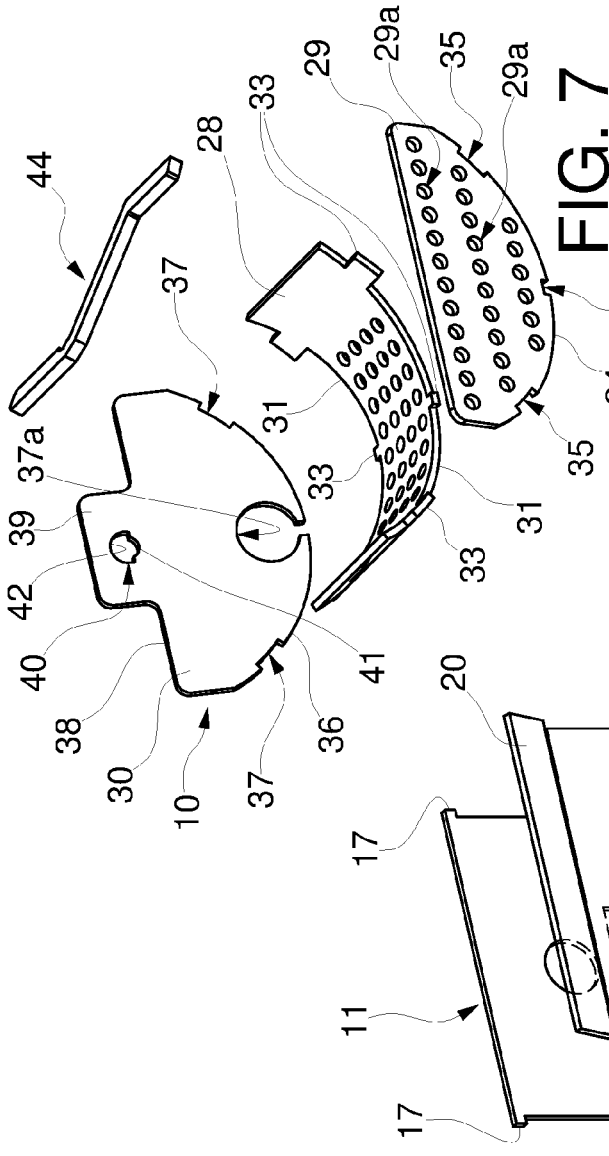


FIG. 7

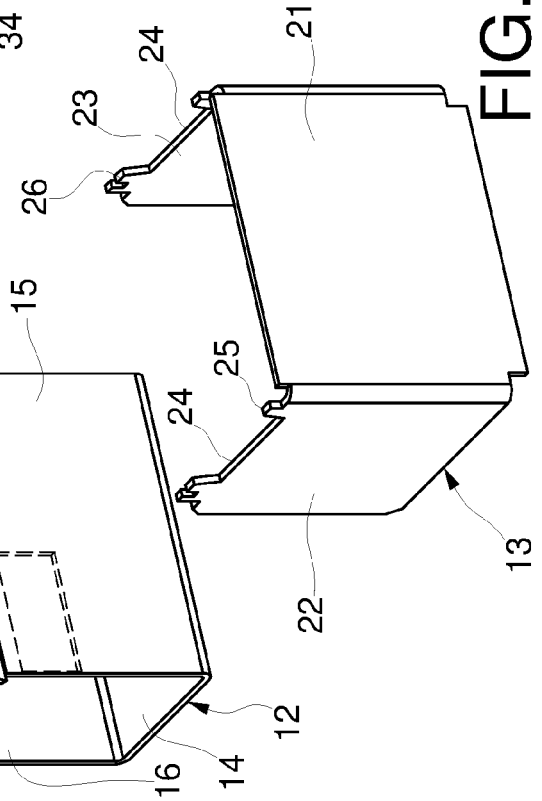


FIG. 8

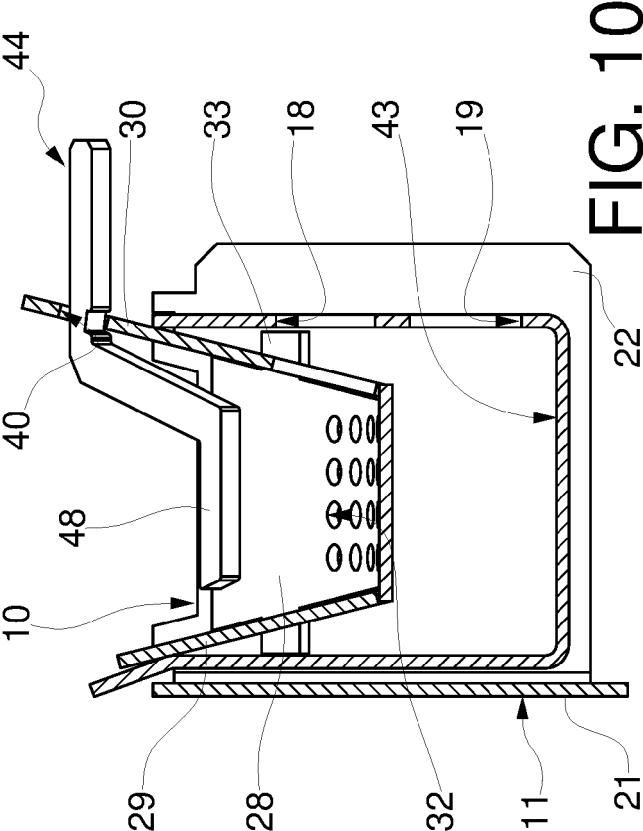


FIG. 10

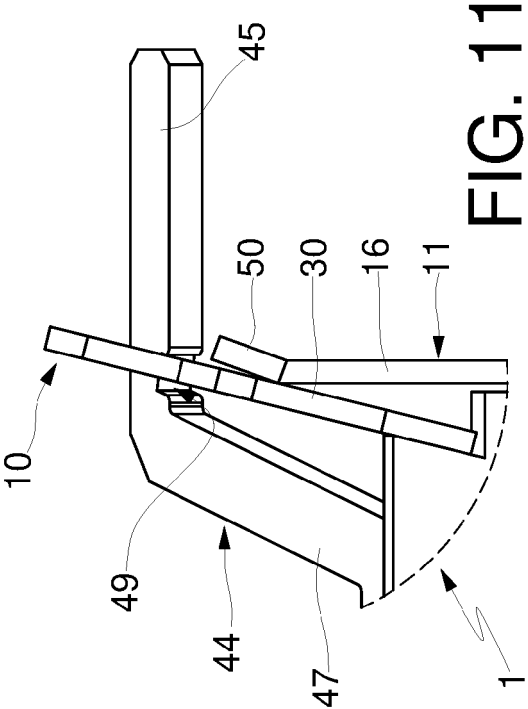


FIG. 11

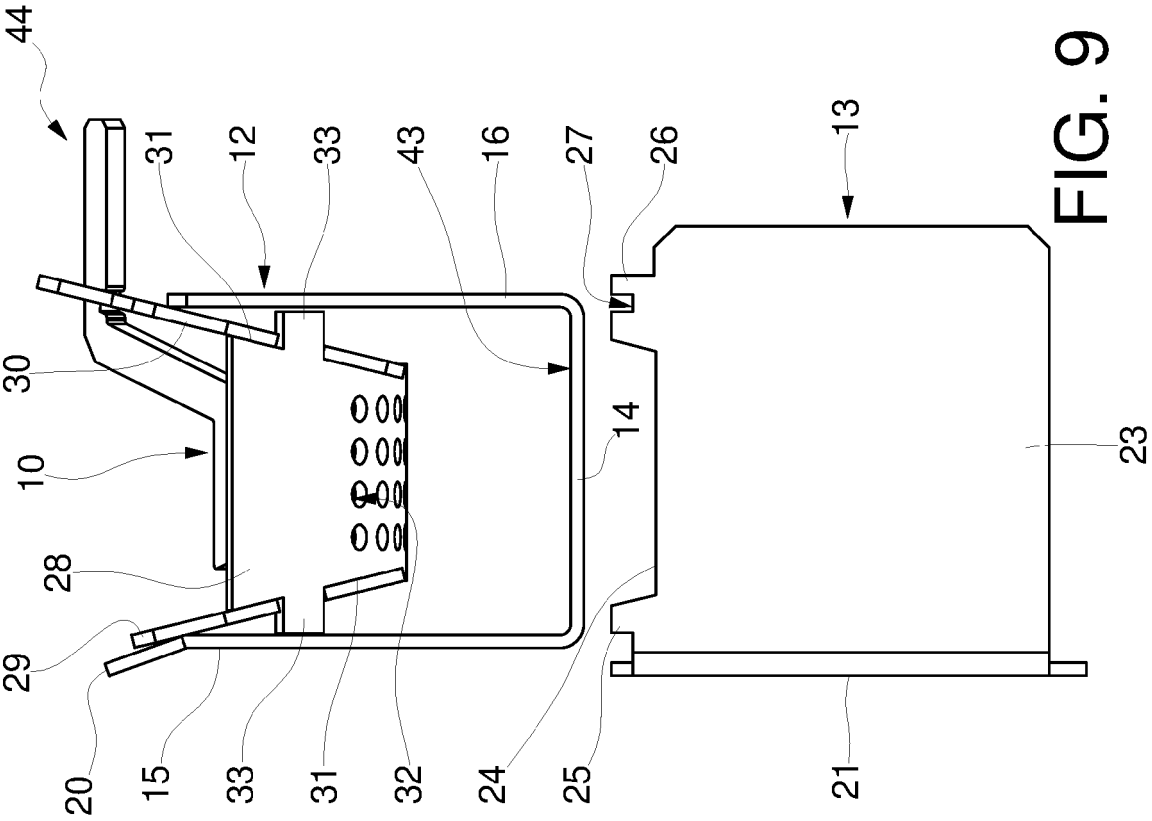


FIG. 9

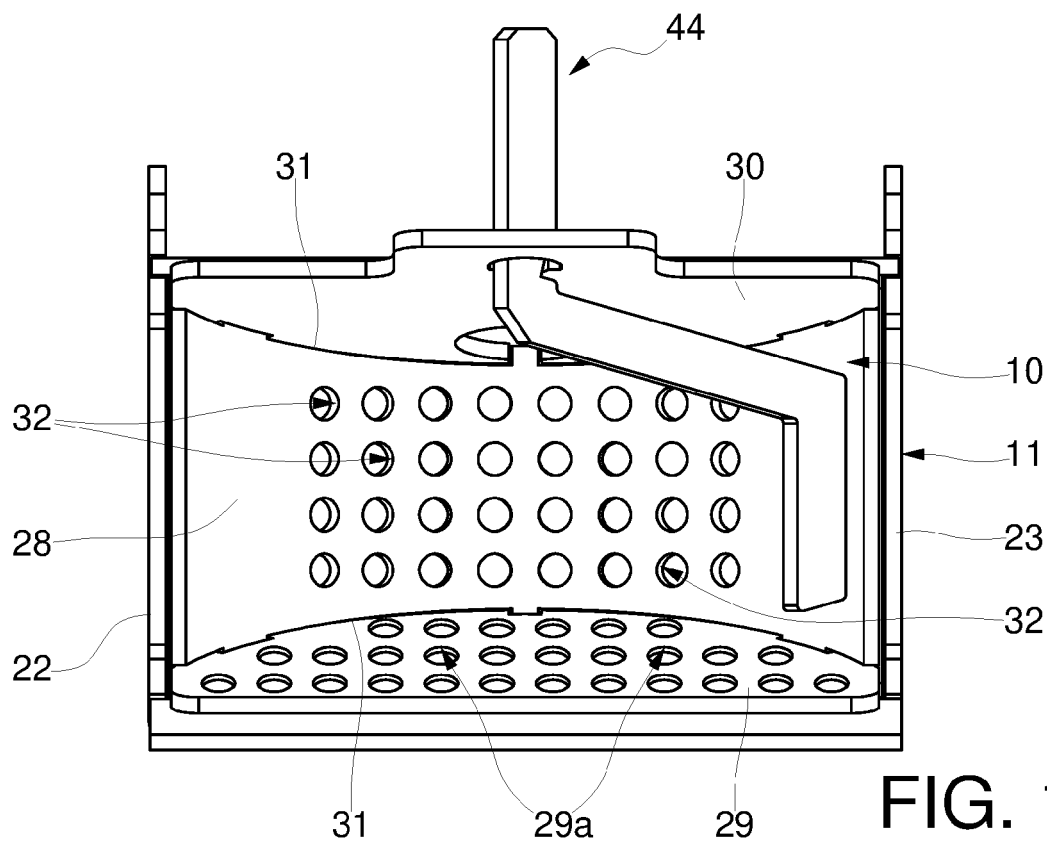


FIG. 12

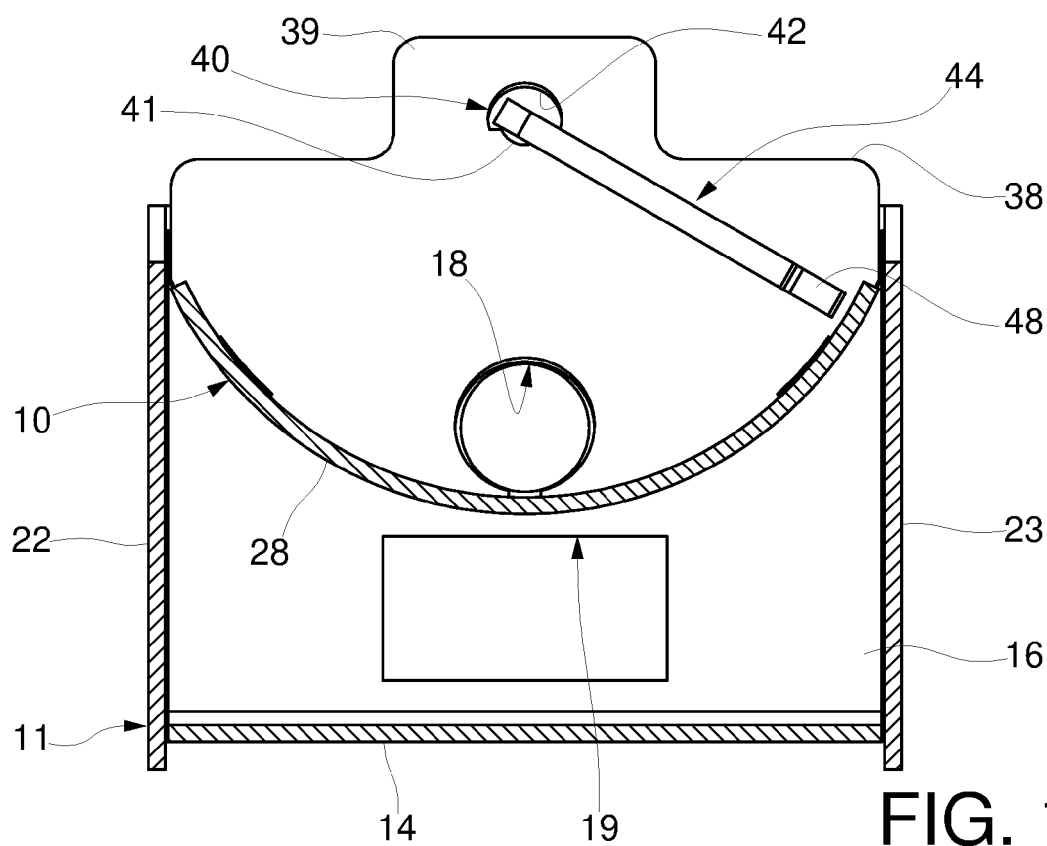


FIG. 13

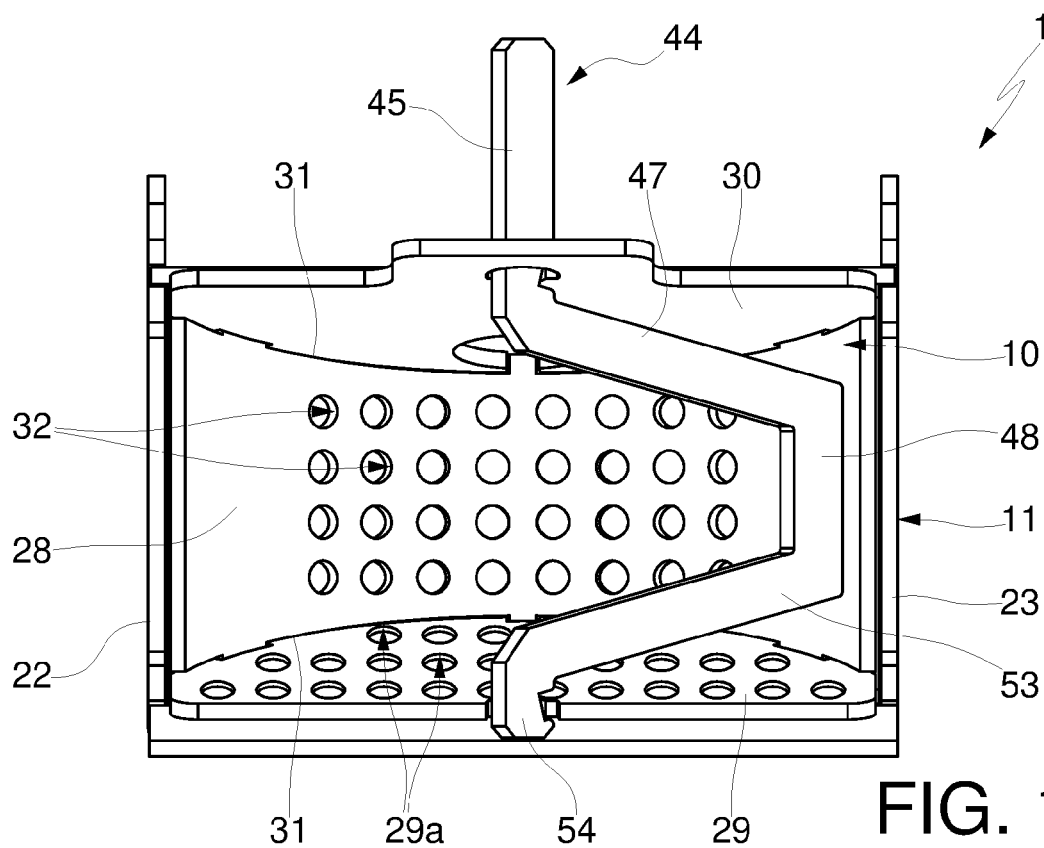


FIG. 15

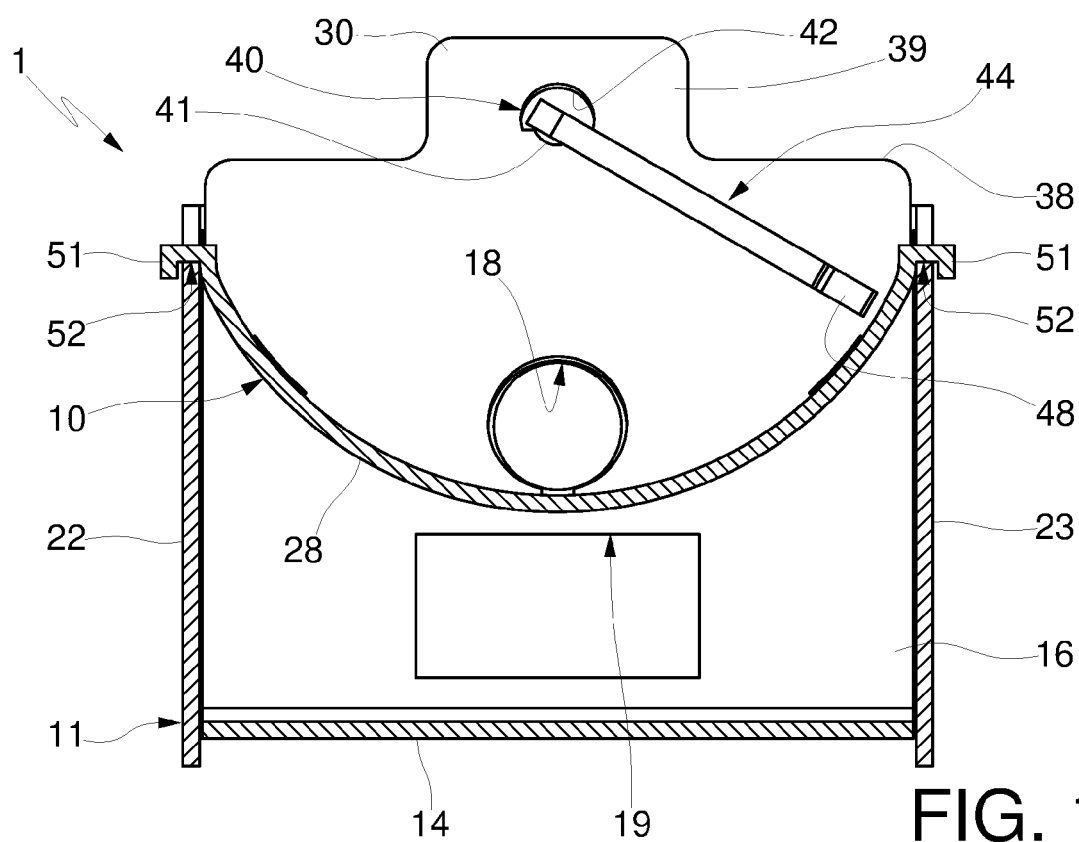


FIG. 14



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Y	* column 4, line 10 - column 9, line 2;	2	F24B13/02
A	figures 1-6 *	7,9,18	F23B40/08 F23H15/00
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A	* paragraph [0010] - paragraph [0062]; figures 1-12 *	7,9,18	
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A	* paragraph [0012] - paragraph [0027]; figures 1-6 *	7,9,18	
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Place of search Munich		Date of completion of the search 8 March 2021	Examiner Theis, Gilbert
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