May 21, 1968 J. A. THRASH 3,384,407

HOME FIREPLACE LOG CARRIER

Filed March 7, 1966

FIG. 1

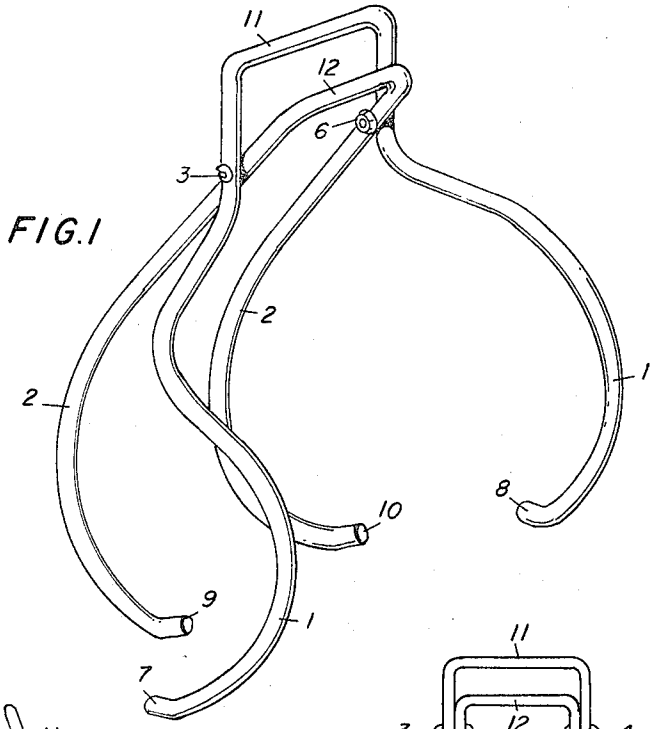


FIG. 3

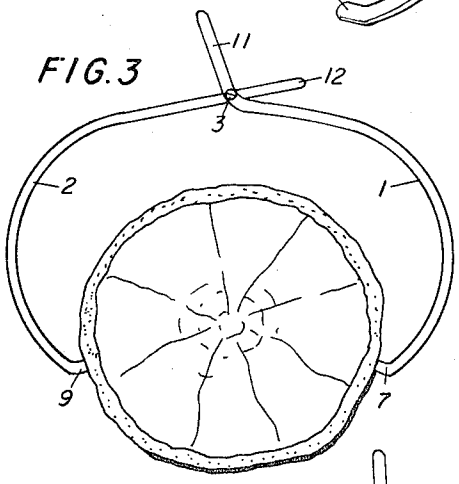


FIG. 2

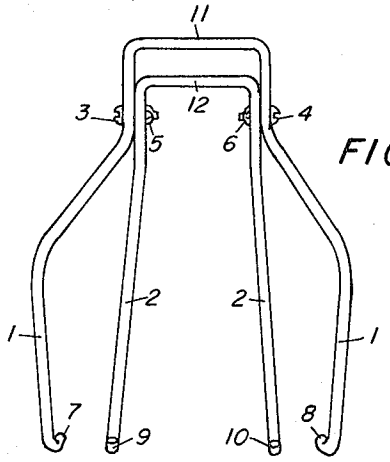


FIG. 4

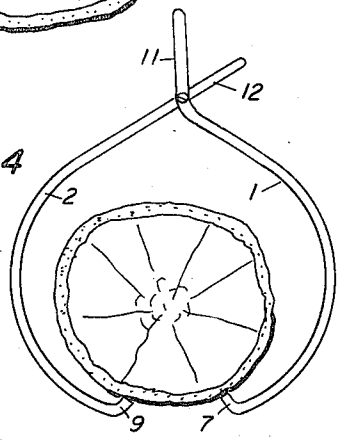
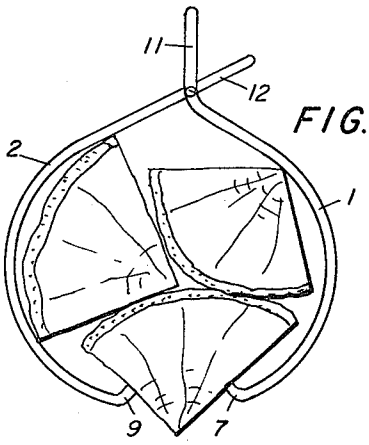


FIG. 5



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HOME FIREPLACE LOG CARRIER

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ABSTRACT OF THE DISCLOSURE

The device is a home fireplace log carrier which may be used in picking up, transporting and discharging one or more home fireplace logs, or splits of logs, from a stack or pile of such logs to the hearth or fireplace.

Summary of the invention

A home fireplace log carrier to be used by a person in picking up, transporting and discharging one or more home fireplace logs, or splits of logs, from a stack or pile to the hearth or to the fireplace. The invention, or device, is manufactured from two solid ⅜" aluminum rods formed in the shapes illustrated in FIGS. 1, 2 and 3 and bolted together as illustrated at points **3** and **4** as shown in FIG. 1.

Description of views of drawings

FIG. 1 shows an oblique view of the device as it stands upright.

FIG. 2 shows a direct frontal view of the device.

FIGS. 3 and 4 show side views and cross sections of logs being carried.

FIG. 5 shows a side view and a cross section of splits of logs being carried.

Detailed description

The device consists of two working parts, **1** and **2** (FIGS. 1 through 5), which are shaped from two ⅜" solid aluminum rods 39" and 33" respectively in length, bolted at points **3** and **4** (FIGS. 1, 2 and 3) with two 3/16" x 1" stove bolts having locknuts, shown at points **5** and **6** (FIG. 3). Bolt holes are drilled to 7/32" diameter to permit free and independent swinging of parts **1** and **2**.

When sitting closed and upright, the overall length of the device measures 13" from the extremities (fingers) of the arms shown at points **7**, **8**, **9** and **10** to the handle **11** (FIG. 2). Width of handle **11** (FIG. 2) is 4¾". Distance from handle **11** to bolts **3** or **4** (FIG. 2) is 3½". Width of lower handle **12** (FIG. 2) is 4". When the device is closed, the vertical distance between the bolts **3** or **4** and the fingers **7**, **8**, **9** and **10** is 9½" and the distance between the arms **1** and **2** at the widest point, horizontally, is 7½". The arms of parts **1** and **2** are curved in an opposite manner from one another on a radius of 3¾". The arms of part **1** (FIG. 2) diverge transversely from the bolts **3** and **4** through one-half of the curvature of the arms while the arms of part **2** (FIG. 2) have slight, continuous transverse divergence from the bolts **3** and **4** (FIG. 2) to their respective extremities, fingers **9** and **10** (FIG. 2). The width of the arms of part **1** (FIG. 2) at the widest point of transverse divergence is 10". The distance between the fingers **7** to **8** of the arms of part **1** (FIG. 2) is 9¼". The distance between the fingers **9** to **10** of the arms of part **2** (FIG. 2) is 5", thus establishing a slight transverse divergence of those arms.

When viewed from the side down its longitudinal axis (FIG. 4), the device can be seen to be pear-shaped, since the curves of the opposing arms, **1** and **2**, are not effected from the same radii throughout the lengths of the arms. The outside angle between the vertical portion of handle **11** and the upper portion of arm **1** approximates 143 degrees. The angle made by either of the fingers **7**, **8**, **9** or **10** and its respective arm approximates 140 degrees.

When closed, the arms of **1** and **2** completely overlap at the fingers **7**, **8**, **9** and **10**, thus completely enclosing or enwrapping a log being carried when the diameter of the latter is less than twice the aforementioned radius. A log with a diameter of less than 11" will permit the fingers **9** and **10** and **7** and **8** to close below its horizontal axis (FIG. 3), thus enabling the device to grasp, hold and lift the log (FIGS. 3, 4, 5).

The average diameter of home fireplace log is about 5". The device is capable of grasping, holding and lifting one or more logs whose total diameter is less than 11". The object, or log, need not be round, but the fingers **7**, **8**, **9** and **10** must grasp the object, or log, below its horizontal axis, with the widest part of the object, or log, above the fingers (FIG. 3). The minimum length of the object, or log, to be grasped, held and lifted must be in excess of the distance from finger **7** to **8** (FIG. 2). The maximum weight of the object, or log, to be grasped, held and lifted should not exceed 75 pounds. Excessive weight will cause the device to bend, thus changing its shape and characteristics which, in turn, would alter its principle of operation.

In order to operate the device, the operator holds handle **11** (FIG. 1) with one hand, using an overhand grip, with the arms of part **1** (FIGS. 1, 2, 3 or 4) away from himself. Then, with the other hand he graps one arm of part **2** (FIG. 1), which is free swinging, and pulls it toward himself, thus opening the device as illustrated in FIG. 3. Next, he places the fingers **9** and **10** (FIG. 1) of part **2** under the general center, lengthwise, of the object, or log, and at the same time moves the fingers **7** and **8** (FIG. 1) over the object, or log, contacting it on the opposite side, below its horizontal axis (FIG. 3). With the device in this position, the operator lifts the handle **11** (FIG. 1), and the four fingers, **7**, **8**, **9** and **10** grasp the object, or log, thus permitting it to be held, raised and carried in the device. To discharge the object, or log, the operator sets the device on the floor with the handle **11** more or less in a vertical position, rotates the device toward himself so that the pressure exerted by the log against fingers **7** and **8** is reduced to a level whereby he can freely raise the arms of part **1** by moving either arm in an upward motion until the device is in the fully open position. With the device held open, the operator rotates it away from himself, thus rolling the log free.

When the four fingers, **7**, **8**, **9** and **10** (FIG. 3) have made proper contact with the log and the handle **11** (FIG. 3) is lifted, the weight of the log is simultaneously distributed against the four fingers. Slippage is prevented because of the friction between the fingers and the log. The off-set curvature of part **1**, below the handle **11**, is on a radius of 1 3/16". This off-set curvature permits an even distribution of weight on the four fingers (FIG. 3). This would be impossible if there were no curvature, for more weight would be placed on fingers **7** and **8** (FIG. 3) and the center of gravity would be to the side rather than directly below the handle **11**.

Use of this device in the manner described above provides the operator with certain advantages:

(1) A log weighing 40 to 50 pounds can be lifted and transported in a more efficient manner than by hand.

(a) The weight is held by the operator in one hand in a vertical position, as in carrying a suitcase.

(b) Eliminates horizontal lifting, thereby reducing the possibility to arm and back muscles.

(c) Eliminates the possibility of accidental dropping which could endanger the operator and persons or property nearby.

(d) The device can be operated with one hand, leaving the other free for such uses as opening and closing doors, turning lights on and off, etc.

(e) Permits unimpaired vision by having the log, or logs, at one's side rather than at one's front at the chest.

(f) Permits surer footing because of better visibility and lower center of gravity.

(2) Log does not come into contact with the operator's clothes or hands, thus soiling of clothes or hands which is usually the result of carrying logs in one's hands or arms is eliminated.

(3) Smouldering logs of the minimum length referred to above can be removed from the fireplace when cleaning is desired.

(4) Because this device increases one's capacity for lifting and carrying far more log weight than is otherwise possible, children, women and older people, especially, will find its use most beneficial.

(5) One operator, using two such devices simultaneously, can supply logs to his fireplace 100% faster than he could without the use thereof.

(6) The device will not rust, break, crack, chip, bend, discolor or wear out under normal use.

Although the device has been shown in the accompanying drawings and its structure, features and operation have been described in detail in the foregoing specification, it is to be readily understood that the improved home fireplace log carrier may be modified or changed without departing from the scope of the invention or scope of the append claim.

What I claim is:

1. A hand operated home fireplace log carrier consisting of two pairs of bowed arms, the arms of each pair being joined by a handle portion, one pair being wider than the other pair laterally at all similar points, means joining each pair so that the pair of arms are cross pivoted on a longitudinal axis below their handle portions, oppositely curved about equal radii extending from the vertical plane along the longitudinal axis, with the arms of the wider pair diverging away from each other laterally from the pivotal points through half of their arcs while the arms of the narrower pair slightly diverge laterally away from each other through all of its arc.

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