The present invention relates to internal combustion engines for power-driven tools, such as portable saws, and more specifically to engines of this kind having a casting which is made in two halves.

It is an object of the invention to provide a rugged engine of this type which is of comparatively simple design and therefore can be produced at a low cost.

In an engine according to the invention the casing is divided into two halves along a substantially medial plane which form the supporting structure of the engine and these halves are formed with cavities which are open towards that side of each casing half which faces the other casing half, said cavities either forming the engine crank case and a fuel container or forming a space for receiving such elements.

According to the invention, the casing halves may further be provided with cavities forming a lubricant container or a space for receiving such container.

Further objects and features of the invention will appear from the following detailed description of a preferred embodiment, applied to a portable power-driven saw, reference being had to the accompanying drawings, wherein:

FIG. 1 is a cross-sectional view of a casing according to the invention for the engine of a power-driven saw;

FIG. 2 is a longitudinal section taken through that plane along which the casing is divided into two halves (i.e. along line II—II in FIG. 1 and also II—II in FIG. 3);

FIG. 3 is a longitudinal section taken along the line III—III in FIG. 1, and;

FIG. 4 is a view of the portable saw, partly broken and drawn to a smaller scale.

In the drawings 1 and 2 designate the two halves of a motor casing divided along the plane indicated by II—II in FIGS. 1 and 3 which is substantially the medial plane of the complete casing. A cover placed over the interconnected casing halves is indicated at 3. The casing is further provided at one end with a handle 4 which in the embodiment shown is likewise composed by two halves each made in one piece with one of the casing halves 1 and 2. To that end of the casing which is opposite the handle 4 there is attached a carrying yoke 5.

FIG. 2 shows the casing half 1 seen from the dividing plane (II—II in FIGS. 1 and 3). The casing half 1 is formed with cavities 6, 7 and 8 which are open at the side facing the dividing plane, and the other casing half 2 is provided with corresponding cavities 106, 107 and 108 likewise open towards the dividing plane and disposed opposite the cavities 6, 7 and 8, respectively, in the casing half 1.

The cavities 6 and 106 together form a space for the cylinder 9 of the engine. The engine crank case is formed by the cavities 7 and 107. A recess 10 in the partition wall between the cavities 6 and 7 of casing half 1 is formed correspondingly disposed recess 110 in the casing half 2 together form an opening for the piston rod 11.

In the example shown in the drawings, the engine is a two-stroke carburettor engine with the crank case adapted as the scavenging pump. The carburettor 12, shown in broken lines in FIGS. 1 and 2 is mounted in the space under the cover 3 over an inlet port 13 communicating via a passage 14 with the crank case formed by the cavities 7 and 107.
driven tools and the like, comprising a casing enclosing said engine and forming the supporting structure thereof, said casing being divided into two halves along a substantially medial plane, each of said halves having cavities formed therein which are open towards said plane, said cavities forming the engine crank case, a space for receiving a fuel container and a space for receiving a lubricant container.

4. An internal combustion engine as claimed in claim 3, wherein said fuel and lubricant containers are made of plastic material.

5. An internal combustion engine for portable power-driven tools and the like, comprising a casing enclosing said engine and forming the supporting structure thereof, said casing being divided into two halves along a substantially medial plane, each of said halves having cavities formed therein which are open towards said plane, said cavities forming the engine crank case and a space adjacent thereto for receiving a fuel container and a lubricant container both made of plastic material, said lubricant container being disposed between said crank case forming space and said fuel container.

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