

# MOTEUR UNIVERSEL "AMPHION"

A REVERSIBLE TWIN CYLINDER  
ATTACHABLE ROW, BOAT  
MOTOR AND POWER PLANT

*"The Motor of a Hundred Speeds"*

BUILT IN MILWAUKEE  
BY  
A. J. MACHEK & CO.  
MILWAUKEE, WIS.

PATENTS APPLIED FOR

O. F. EWERT, Supt.

The "AMPHION" UNIVERSAL—REVERSIBLE—Motor is the most complete of any small motor boat engine ever offered to the public—and its manifold good features can leave the interested person with no doubt as to the correctness of that statement.

This motor reflects the best modern French Marine Engine practice. It is an established fact that France produces the finest, fastest and best automobile and marine motors, and this is conclusively proven by the fact that nearly all prize winning cars are either built in France, or are of French design. "MOTEUR UNIVERSEL AMPHION" is a French double cylinder marine engine in miniature, but made in America by approved American methods of manufacture. The bore of the cylinder is 63.5 millimeters and the stroke is 63.5 millimeters, or about 2 1/2 x 2 1/2 inches. Its entire weight is about 75 lbs.—light enough to be easily handled and heavy enough to allow it to be of durable construction. Durability, Ruggedness and Symmetry are characteristics of the French design and found in the "AMPHION" MOTOR—Pronounced "Am-Feé-on."

## ENGINE REVERSIBLE AND A SOLID WEEDLESS SPEED WHEEL:

The Vertical Twin Cylinders make for Balance and Positive Reversing. Thereby making possible the successful use of a Solid Propeller. The light, frail, delicate parts of a reversible blade propeller are not in keeping with the rugged construction of the "AMPHION" MOTOR. Its copper water jacket allows of easy repairs in case of breakage through a freeze-up. As is known, in most cases when the water in the jacket of the ordinary cast iron cylinder freezes it is sure to be broken, necessitating the purchase of entirely new cylinders, while in the "AMPHION" MOTOR its Copper water jacket will merely bulge out and this is easily repaired, thus in many cases saving the price of new cylinders.

## LARGE DIAMETER BEARINGS:

The Large, Long, Oversize (French Heavy Marine Duty Dimensions) bearings of the Heat Treated Crank Shaft (three bearings) run in Renewable Bronze Bushings. The crank Shaft is delicately counterbalanced and practically all vibration is eliminated. The nicety to which this has been brought can only be appreciated by one who has seen the "AMPHION" MOTOR running at high speed. These most important and exclusive "AMPHION" features should not be lost sight of when purchasing a motor for Year Round Service.

The Pistons after having the Three Rings fitted are carefully weighed and a piston is allowed to pass, only after it has been brought to the specified weight.

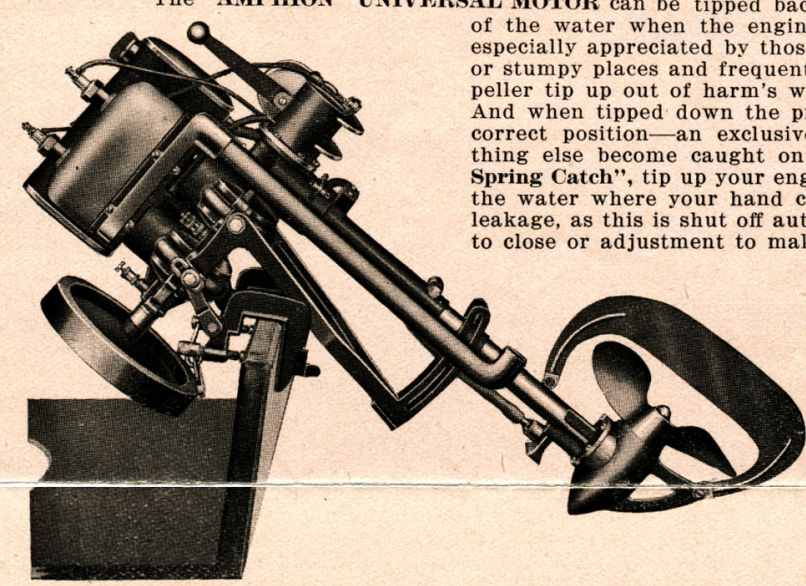
No packing or any kind is used between the joints of the crank case. All the joints are ground metal to metal, so that the motor can be easily taken apart for cleaning by the novice and re-assembled with assurance of satisfactory operation afterwards.

## MOTEUR UNIVERSEL "AMPHION" IS A UNIT POWER PLANT IN MINIATURE:

The Motor, Magneto, Gasoline Tank and Clutch are a unit and are separable from the part which makes it purely a rowboat motor. This "AMPHION" feature allows the motor to be used for an infinite number of purposes, limited only by the locality and uses to which an owner may have occasion to put it. A most important and useful feature. The same motor can be used in the canoe and be quickly transferred to the row boat, or taken to the house, barn or shop to do other work. It is built for hard service and will stand up under it.

## TILTING MOTOR:

The "AMPHION" UNIVERSAL MOTOR can be tipped back, thus making it easy to raise the propeller out of the water when the engine is not in use. This "Tip-Up" feature will be especially appreciated by those who have to contend with shallow water, rocky or stumpy places and frequent portages. The rudder, propeller guard and propeller tip up out of harm's way without the trouble of unclamping the motor. And when tipped down the propeller shaft automatically assumes its precisely correct position—an exclusive "AMPHION" feature. Should weeds, or anything else become caught on your propeller it is only necessary to "Press a Spring Catch", tip up your engine and the propeller is immediately raised out of the water where your hand can reach it. There is no danger of any gasoline leakage, as this is shut off automatically when the engine is tipped up, no valve to close or adjustment to make. Consider what this means when your boat is tied to the dock or at the shore—the propeller tipped up so it cannot possibly be harmed when the action of the waves Rocks and sways the boat.



## LOCKING ARRANGEMENT:

The "AMPHION" MOTEUR can be locked to the boat. Therefore it is thief proof, i. e., as thief proof as any boat motor can be made. Unless brute force is used and damage done to the boat, or the boat itself stolen, the engine can not be removed without the key, after it has once been locked.

## NO STARTING CRANK OR HANDLE:

The fly wheel is solid—no spokes in which a hand could be caught. No handle to catch and injure your fingers or arm. A knob or handle is always highly dangerous. The fly wheel rim is nickel plated and so shaped as to comfortably fit the hand for starting.

## SPEED:

The normal speed of the motor is about 1100 R. P. M. and with the 10 inch—16 inch Pitch Manganese Bronze propeller furnished, will drive an ordinary row boat at from 12 to 14 miles per hour.

## TELESCOPED GEAR HOUSING AND WEEDLESS PROPELLER:

The propeller gear housing is so designed as to avoid all unnecessary projections or screws, which would be liable to cause eddies, etc. The propeller fits so closely and is so telescoped to the housing as to allow no space in which weeds may wind themselves.

## RUDDER:

"A Ship without a Rudder" is of course, useless at the best. Therefore, the "AMPHION" UNIVERSAL MOTOR is fitted with a substantial rudder which can be operated by the tiller handle, or by ropes attached to the tiller bar or sector and lead to any part of the boat.

## STEEL BOAT CLAMPS:

The "AMPHION" MOTOR is equipped with steel (and not cast iron or a poor grade of malleable iron) clamps. These clamps are practically unbreakable and the threads in same will not strip as is common when inferior metal is used in these parts. Quality, not bulk, gives the required strength and durability.

## EASE OF REPAIR:

Some minor parts of any motor are liable, due to the peculiar requirements of a motor of this kind, to be misused or broken, and therefore all parts of the "AMPHION" MOTOR are built interchangeable and are so designed as to be readily repairable. No special tools are needed to give this motor proper attention.

## HOTCHKISS SILENCER AND CUT-OUT:

The "AMPHION" MOTOR is equipped with the "Hotchkiss" Silencer, or with an underwater exhaust, at your option. The Silencer costs us more, but we recommend it in preference to the under water exhaust, as it is the better method. Apropos of the demand for a silencer, such is furnished with the "AMPHION" MOTOR, but if the owner wishes to hear the exhaust of the engine he has but to open the "Cut-Out"—and the saucy, snappy "AMPHION" Twin Cylinder Motor will speak for itself. The clear, rapid reports, can but sound like music to the real motor boat enthusiast. The even distribution of power is audibly verified by the sweet purring of the motor.

But—if silence is in order the Hotchkiss accomplishes this to perfection.

## PROTECTION—IN EXTRAORDINARY POWER:

Security in extra power. There may be a time when on the power of your detachable row boat motor your life depends. The "AMPHION" is of 80% greater service to you when this occasion arises.

## BOSCH HIGH TENSION WATER PROOF MAGNETO:

The Bosch Special Water Proof Magneto is used because it is known to be the best in the world, of German design and originally made in Germany, but now built in America, it stands out pre-eminently as the best that can be built in a high tension magneto. The Bosch Magneto Company have about 300 service stations throughout the United States. This surely means much to you. Should the time come when your magneto is in need of repairs you get the quickest possible service, with the least possible loss of time. We use the most costly magneto because it is the best that the market has to offer and has proven itself the most reliable.

## FRICITION CLUTCH—A FREE PROPELLER:

A friction clutch is located at the rear of the crank shaft in an aluminum housing, so that when starting, the motor is free and the power need not be applied to the propeller until you are ready to go ahead. You do not need to propel yourself and your boat over a great portion of water while endeavoring to start it, as is the case with many old style, ordinary detachable motors. When desiring to stop at a pier or other landing it is not necessary to stop the engine. Simply throw out the clutch, thus disconnecting the power from the propeller. And at the same time the throttle control makes it possible to have your engine running at a minimum speed while it is thus disengaged. When starting, you turn over the engine fly wheel—the engine starts, but your boat remains stationary. Then, when you are ready, the clutch is thrown in and the boat starts away. The landing is just as easy—the boat is run up to the dock, the clutch is thrown out and through the use of the rudder your boat is guided to the exact stopping point.

The "AMPHION" POWER UNIT consisting of the motor, tank, magneto and clutch is readily detachable from the boat clamps and drive equipment so that it can be quickly set into the iron stand we furnish and used for innumerable stationary purposes. A cone pulley with three different sizes of pulleys for either round or flat belt gives a ready means of driving machinery.

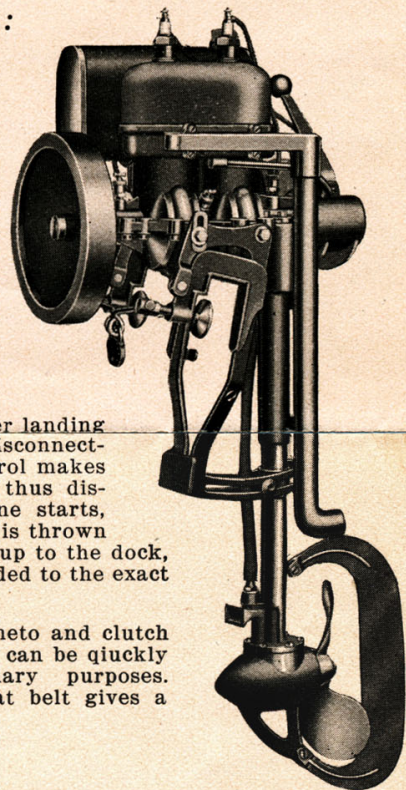
## CENTRIFUGAL PUMP EQUIPMENT:

With the boat moored at the landing and the Motor attached and by using the tipping feature the Boat Drive Equipment is easily removed. The Centrifugal Pumping Equipment is then readily inserted in its place—the Motor tipped back into the water and you have a water supply for your garden, garage, barn or house tank.

## "AMPHION" SPECIAL CANOE MOTOR:

NOTE—The "AMPHION" REVERSIBLE CANOE MOTOR is not our standard or regular type of attachable motor, but is designed for canoe purposes.

The power unit is identical with the regular motor, with the exception of the lower or bottom half of the crank case. This latter part is designed for canoe use and so equipped as to be easily attached with bottom of canoe for permanent use thereon. Through this arrangement the "AMPHION" UNIVERSAL MOTOR sets down into the bottom of the canoe—as low as possible. This brings the weight to the proper point, helping to balance your canoe instead of making it unsafe, as is the case with all other detachable boat motors. Consider the extreme safety given by this feature. And importantly, the propeller and rudder extend out of the back of the canoe where they properly belong—not through the middle of the bottom.



## ORDER.

A. J. MACHEK & CO.,  
Marine Motor Department,  
O. F. EWERT, Supt.  
306-24th St., MILWAUKEE, WIS., U. S. A.

### Please Enter Our Order as Follows:

"AMPHION" UNIVERSAL MOTOR, Complete with Clutch, Bosch Magneto, Hotchkiss Silencer or Under Water Exhaust .....	\$97.00
"AMPHION" UNIVERSAL MOTOR, Complete with Clutch, Battery Ignition, Hotchkiss Silencer .....	89.00
"AMPHION" UNIVERSAL MOTOR, no Clutch, Bosch Magneto, Hotchkiss Silencer .....	92.00
"AMPHION" UNIVERSAL MOTOR, no Clutch, Battery Ignition, Hotchkiss Silencer .....	85.00
"AMPHION" UNIT POWER PLANT, for Permanent Installation in a Canoe, Bosch Magneto, Clutch, Propeller, Shaft and Shaft Log .....	95.00
"AMPHION" MOTOR, for Permanent Installation in a Canoe, Battery Ignition, with Clutch, Propeller, Shaft and Shaft Log .....	87.00
"AMPHION" MOTOR, for Permanent Installation in a Canoe, with Bosch Magneto, (no Clutch), Propeller, Shaft and Shaft Log .....	88.00
"AMPHION" MOTOR, for Permanent Installation in a Canoe, with Battery Ignition, Propeller, Shaft and Shaft Log, without Clutch .....	80.00

Enclosed find \$.....

Balance Sight Draft with Bill of Lading Attached Through.....

Balance C. O. D.....  
Money for collection is in all cases added to the bill. Cash with order will eliminate this extra expense.

Make Shipment—How.....

Make Shipment to.....

Make Shipment When.....

Credit Sale to.....

Customers Name and Address.....

Remarks:.....