

to the regular bracket holding bolts, prevent movement of the bearing brackets relative to the frame. Each bracket for frame No. 6 (standard $7\frac{1}{2}$ h.p.) and smaller is cast in one piece, but for larger frames each bracket is split in a plane through the center of the shaft. The brackets can be rotated to bring the countershaft above or below or on either side of the motor. It necessarily follows that the motor can be mounted on the floor, wall or ceiling. The two brackets of a motor are interchangeable.

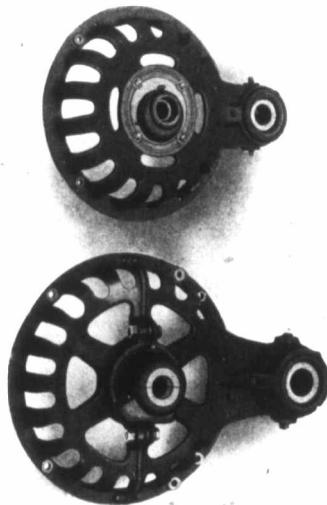
Shafts, Pinions, and Gears. The rotor shaft is standard and is regularly fitted with a steel pinion. The countershaft has ample strength and carries a cast iron gear wheel. Unless otherwise ordered, the pinion and gear will be supplied to give a speed reduction of approximately 5 to 1, but to meet special service conditions these parts can be supplied for other speed reductions. Rawhide pinions are recommended for pitch line speeds of 1200 feet per minute or more. The driving end of the countershaft is fitted with a keyway for holding the driving pulley or pinion.

Rawhide pinions, gear cases, and pulleys or pinions for the driving end of the countershaft are supplied only on special order.

Bearings. On back geared motors with split bearing brackets (frames larger than No. 6) the rotor bearings are the same as those of standard motors without back gears; the smaller motors with solid brackets have separate housings for the rotor bearings, bolted centrally in the brackets. The countershaft bearings of all sizes are brass sleeves pressed into the housings and each held in position by two bolts. These brass sleeves are provided with oil rings and the housings contain oil wells. Tap plugs are provided for inspecting, filling, and draining the countershaft bearings.

In changing the position of the countershaft relative to the motor frame, each rotor bearing housing and each counter shaft bearing sleeve can be rotated through the angle necessary to keep the oil rings riding on the shaft.

Outboard Bearings. When specially ordered, outboard bearings can be supplied for the rotor shafts of the four largest frames and for the counter-



Solid and Split Bearing Brackets for Back Geared Motors