

# THE TRENDSETTERS

TO EMBARK on the production of a machine with a pressed-steel frame is a brave decision for any company — especially a concern as small as Coventry-Eagle. Agreed, such a frame can be bumped out of sheet steel quickly and cheaply; but the necessary press tools are enormously costly.

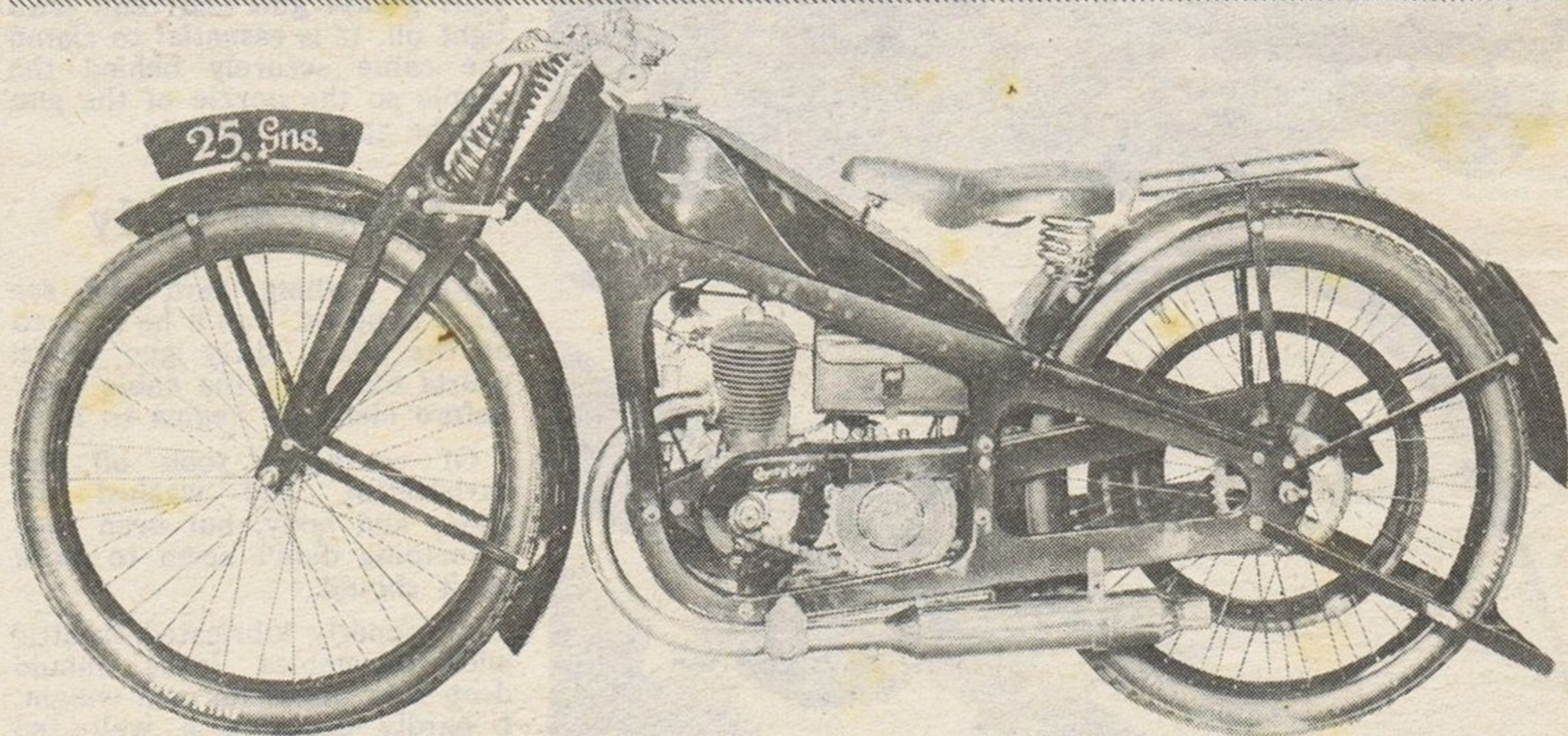
To spread the initial costs, the makers must either have an immediate mass market, or confidence that the design will remain unchanged for many years.

Best-known Coventry-Eagle of the earlier 1920s had been the 1,000 cc vee-twin Flying Eight — and if it bore a marked resemblance to the Brough Superior, the reason was that Percy Mayo, its designer, had been associated with George Brough in the design and launching of the B-S.

But the machine with which Mayo was to startle the visitors to the 1927 Olympia Show was entirely different. The engine was nothing special — just a 147 or 172 cc Villiers — but the frame comprised two side members pressed from sheet steel and joined at the steering head. To lend emphasis, the stand display included similar frames made up in duralumin and stainless steel.

True, around 1911 a Reading concern had built the pressed-steel-frame Midget Bicar. True, too, that Germany's first BMW twin had a frame very similar to Coventry-Eagle's — as, indeed, it had a right to be, for it was built under the Coventry company's patents.

Says Douglas Mayo, chairman and managing director of the firm: "We had many difficulties with the frame in early days. The welding used to split



The first of the pressed-steel-framed Coventry-Eagles, the 147 cc Villiers-powered two-stroke, which made its debut at the 1927 Show

## Pressed-steel Coventry- Eagles

at the steering head, and the more we tried to strengthen it the worse the trouble became.

"Eventually, Sir Alfred Owen took matters in hand and the frame was redesigned at Rubery-Owen's. It must have cost them thousands of pounds, but they came up with a better frame, much stronger and troublefree. However, all this took until 1931."

The new version of the frame featured a dovetail joint between the side members at the

steering head, where there was now a combination of riveting and welding.

However, for 1932 there was not only the new frame but also Coventry-Eagle's first engine, a one-fifty two-stroke.

The porting was a direct crib from a DKW, but somebody booped on the compression ratio, and the first examples would just about de-skin a lightly cooked rice pudding. Unfortunately, 3,000 engines had been built before a remedy was found; rectification set the firm back a packet.

Nevertheless, Coventry-Eagle outstripped the rest of the British industry that year and built more bikes than even BSA.

In the years that followed, various engines were housed in the patent frame, mainly Villiers although, in 1934 only, there

was a sports job with a two-port ohv JAP two-fifty engine.

Final examples, in 1940, used the unit-construction 125 cc Villiers later to earn fame in the parachute-drop military James.

Frame production came to a halt when the bombing of Rubery-Owen's press shops at Darlaston wrecked the dies.

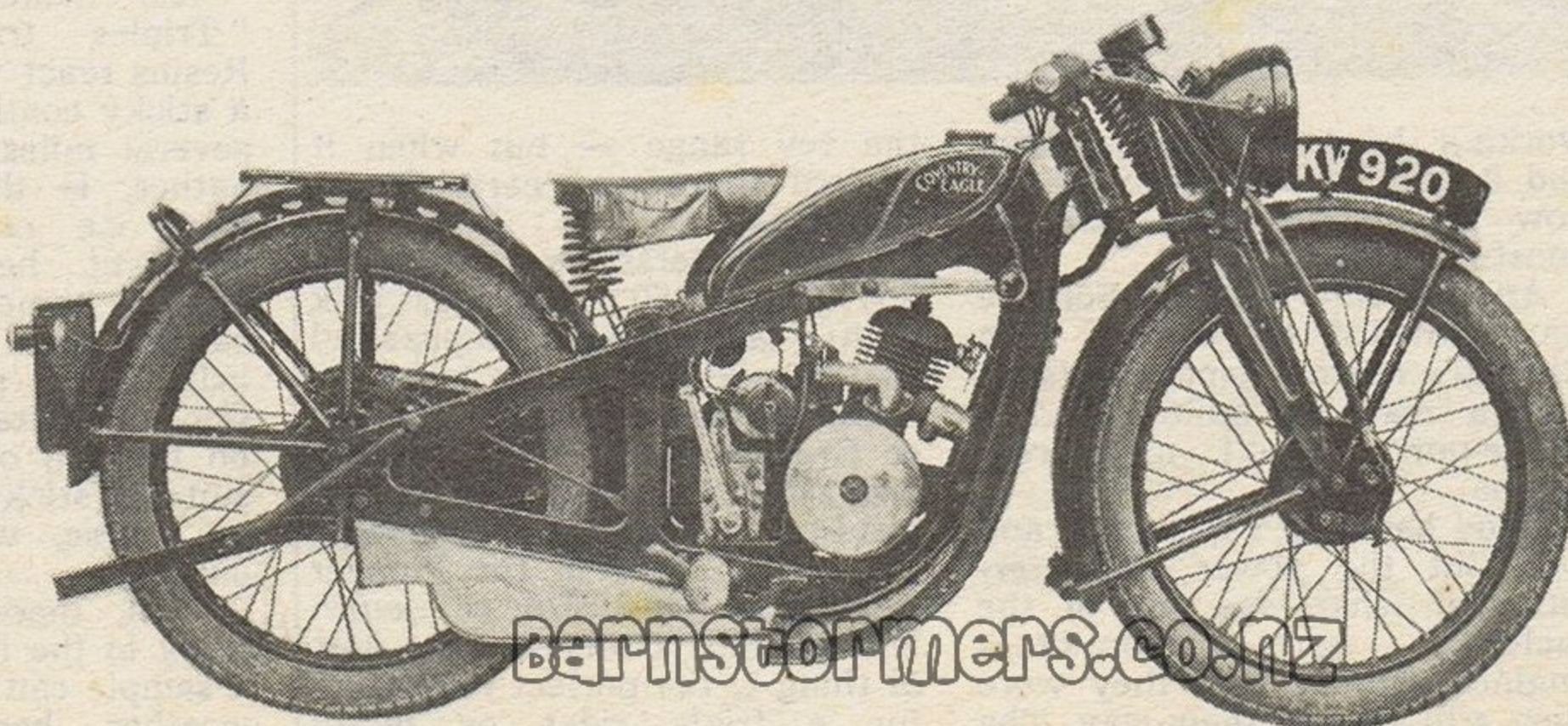
"After the war," adds Mr Mayo, "we considered restarting the motor-cycle side, and Sir Alfred Owen offered to make us a complete set of dies free of charge. This was very generous, but I decided that as we were so busy with pedal cycles, and space in our new works at Tile Hill, Coventry, was limited, it would be far better financially to concentrate on one market."

Had Coventry-Eagle made a peacetime return, it would have been with a machine as startling as had been the first pressed-steel-frame model.

Between 1943 and 1945, a whole string of patents had been taken out for a futuristic motor cycle (frame design by Douglas Mayo, engine by general manager Arthur Woodman, previously responsible for the semi-enclosed New Hudson) in which a two-stroke twin engine, with the cylinders horizontal, was totally hidden inside the lower section of the frame.

A prototype covered quite a large mileage. Alas, the firm gave it the chop on the score of production costs.

The 1932 version of the Coventry Eagle Silent Superb had a pressed-steel frame and front fork, also a 147 cc two-stroke engine made by the factory itself and coupled to a three-speed Albion gear box



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