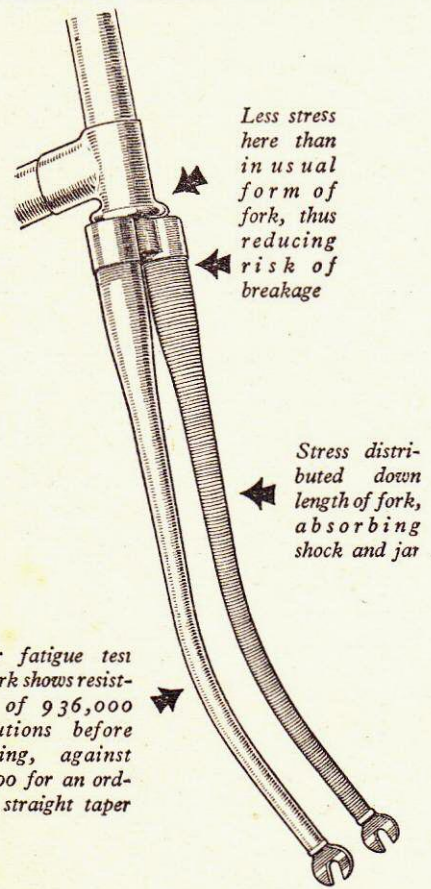


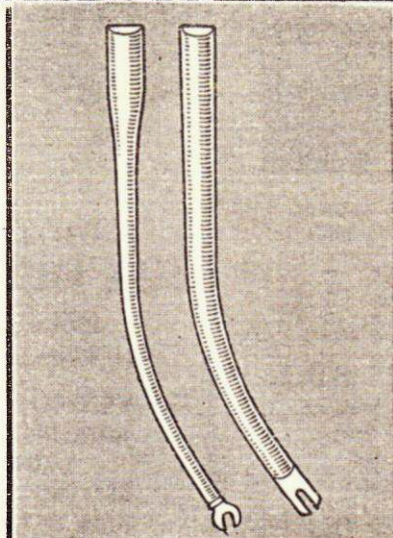
OUR CYCLING EXPERT WRITES ON

# FACTS ABOUT FORKS

well worth remembering when buying a cycle



The usual type of cycle fork blade is so constructed that most of the stress is thrown on the point nearest the crown, and it is here that breakages occur. It is as well to remember, when buying a bicycle, that the famous A AND P curved taper fork blade was designed on a new principle embodying the scientific application of distribution of stress, giving greater strength with less weight, increased resilience and riding comfort. This curved taper fork blade has more than double the resistance of the ordinary straight taper type. One word of warning — do not spoil this fork by brazing the lamp bracket on it.



This diagram shows the difference in looks alone between a "D" fork blade and a curved taper blade. The graceful lines of the latter must inevitably appeal to many cyclists, quite apart from its several advantages.

*Accles & Pollock have been making frames and parts for cycles since early "safety" cycle days, and never cease to experiment with the production of parts and materials likely to improve strength, weight and comfort.*

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# Are you buying a cycle ?

## AN EXPERT GIVES YOU A FEW POINTS TO LOOK FOR

Frame height is important. There is no real reason why your cycle frame should not 'fit' you exactly. The height of a frame is measured from the top of the seat tube where the saddle pin is inserted to the centre of the bracket axle (see Fig. 1). To find the size of the frame to suit you, deduct approximately

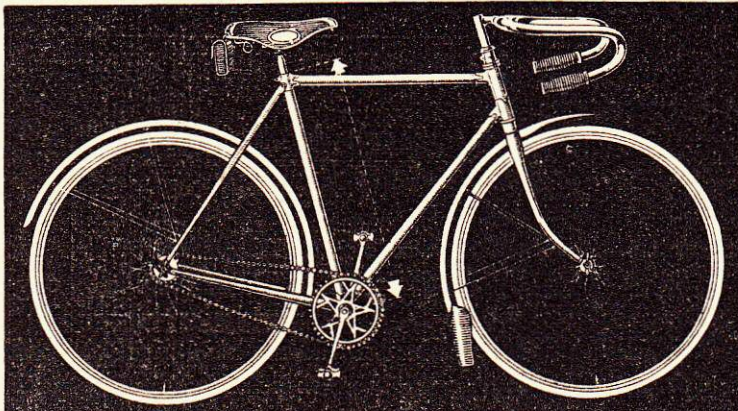


FIG. 1.

*Accles & Pollock have been making tubular parts for cycles since the early days of the 'safety' bicycle, and never cease to experiment with the production of parts and materials likely to improve strength, weight, and comfort.*

nine inches from your inside leg measurement. Don't forget that a small frame is normally 'livelier' than a large one, but even a large frame made by Accles & Pollock Chrome Molybdenum steel tube—difficult name, but worth remembering—can be very lively, because of its remarkably light weight in comparison with its strength.

Don't under-estimate the importance of head strength. Although a good fork blade will

absorb much of the road shock, very heavy strains are still thrown on the lower part of the steering column. For this reason, steering columns made by Accles & Pollock are strengthened by thickening (butting) the wall of the tube where it is to be brazed into the crown (see Fig. 2). Accles & Pollock butted steering columns are at once a safeguard and an economy.

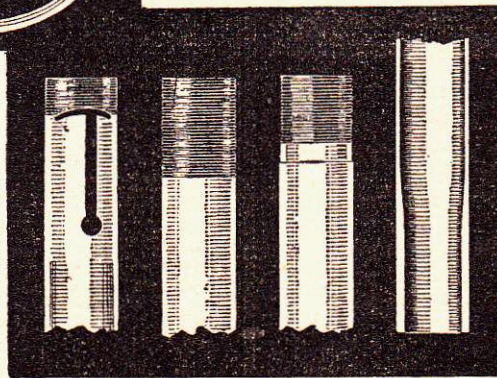


FIG. 2.

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The A AND P cycle expert gives you

# MORE POINTS TO WATCH



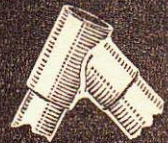
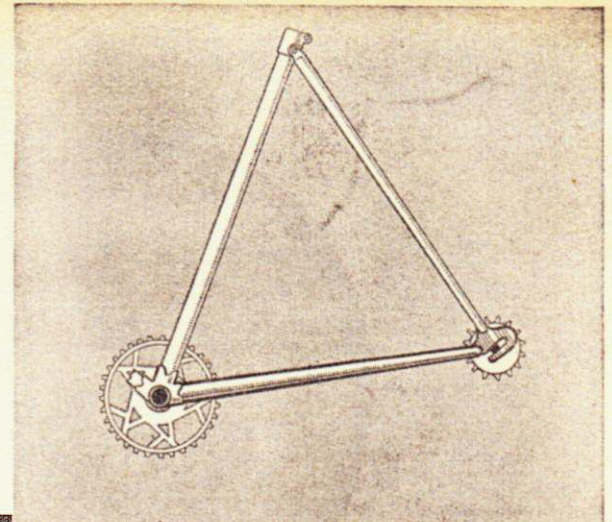
when buying a bicycle

**THAT'S THE POSITION!** 'Position is everything in life!'—so they say. And it's a good deal in cycling. Three considerations must be borne in mind when dealing with the question of the rider's position on a cycle: the saddle, the handlebars and the pedals. The rider's body should be carefully poised to balance the weight upon these three key points. If your wrists ache, experiment by putting your saddle further back. If that is still not comfortable change your handlebars. There is such a wide choice of variations in the A AND P range that there should be no difficulty in finding one exactly to suit your needs. If your cycle is fitted with an adjustable A AND P handlebar stem this, too, will help you to obtain just that position to make all the difference in your comfort.

**WHAT ABOUT WHIP?** This brings us to another of the cyclist's troubles—whip. If the chain stays are not rigid, the pedalling action causes them to whip. Some frame manufacturers make the chain stays of heavier gauge to obviate this, while others

reinforce them, thus increasing the weight. Whip can be avoided and increased weight is unnecessary if your frame is made of A AND P steel tubing, since it combines light weight and tremendous strength in the highest degree.

**JOINTS ARE IMPORTANT.** When an ordinary carbon steel tube is brazed into the lugs of a cycle frame, the heat of brazing softens and weakens the tube at the brazing point. Cycles built of A AND P chrome molybdenum do not suffer from this weakness, simply because this special type of steel has properties which actually enable it to become *tougher* as it cools after being subjected to brazing heat.



*Accles and Pollock have been making frame tubing and tubular parts for cycles since the early 'safety' cycle days and never cease to experiment with the production of tubular parts and materials likely to improve strength, weight and comfort.*

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Our Expert tells you how

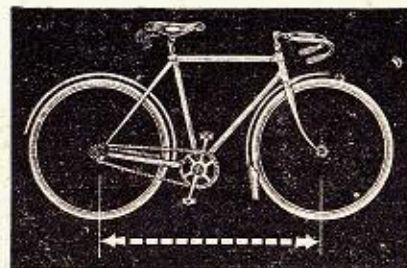
# YOUR CYCLE could weigh **26 ozs. LESS**

HOW IT AFFECTS  
YOUR COMFORT

FAR REACHING  
EFFECTS

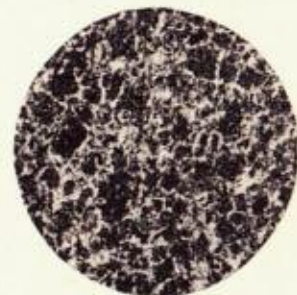
TECHNICAL—  
BUT INTERESTING

You can actually buy a cycle frame that weighs 9 ozs. less than one made of ordinary carbon steel, but is nevertheless considerably stronger. How is it done? It is made possible by the use of a specially tough type of steel made by Accles & Pollock and known as Chrome Molybdenum — an extraordinary name, but well worth remembering. If all the tubular parts as well as the frame are of A AND P chrome molybdenum, a saving in weight of from 26 ozs. can be made. It follows that a bicycle of A AND P Chrome Molybdenum is speedier, better wearing and easier going, especially on hills.



The use of this particular type of frame has far-reaching effects on various parts of the machine. In the matter of wheelbase, for example — the wheelbase of a bicycle is the measurement between the two points on the ground where front and rear wheels touch when in line — the average is about 42 ins. Within reason, the shorter the wheelbase, the more lively the frame; on the other hand, if the wheelbase is too long, the bicycle will drag uphill. An A AND P chrome molybdenum frame, however, will give you maximum liveliness with any reasonable wheelbase.

Here are two photo-micrographs which show the "inside" reason for the superiority of "Kromo" (chrome molybdenum) steel. That at the top is of .35 per cent. carbon steel, seen after brazing. Such steel when heated for brazing purposes has an inherent tendency to grain growth — in clinical jargon, "giving large sorbitic grains with pronounced ferrite boundaries." The effect from your point of view is to lower the "fatigue resistance" of the steel. The lower photo-micrograph shows "Kromo" steel after brazing. Here the addition of the alloys chromium and molybdenum toughens the steel, the ferrite is more uniformly distributed and grain growth prevented. So that, after brazing, an exceedingly tough fatigue-resisting condition is obtained.



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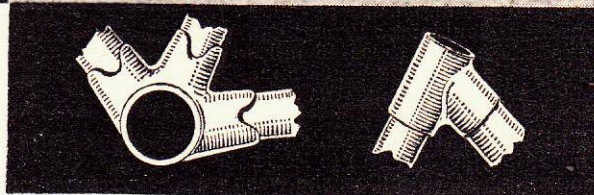
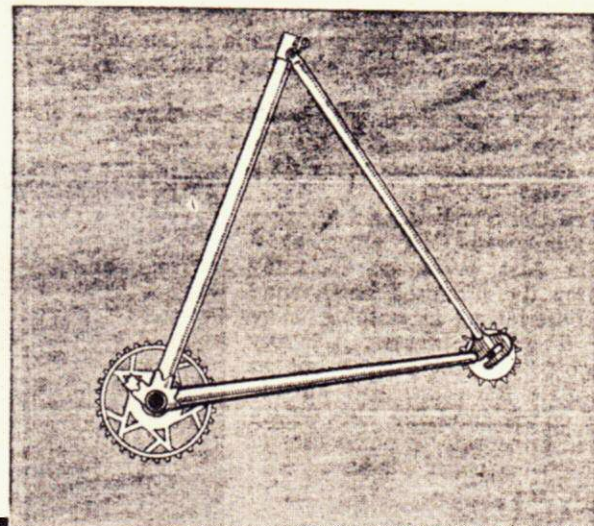
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The A AND P cycle expert gives you

# MORE POINTS TO WATCH



when buying a bicycle



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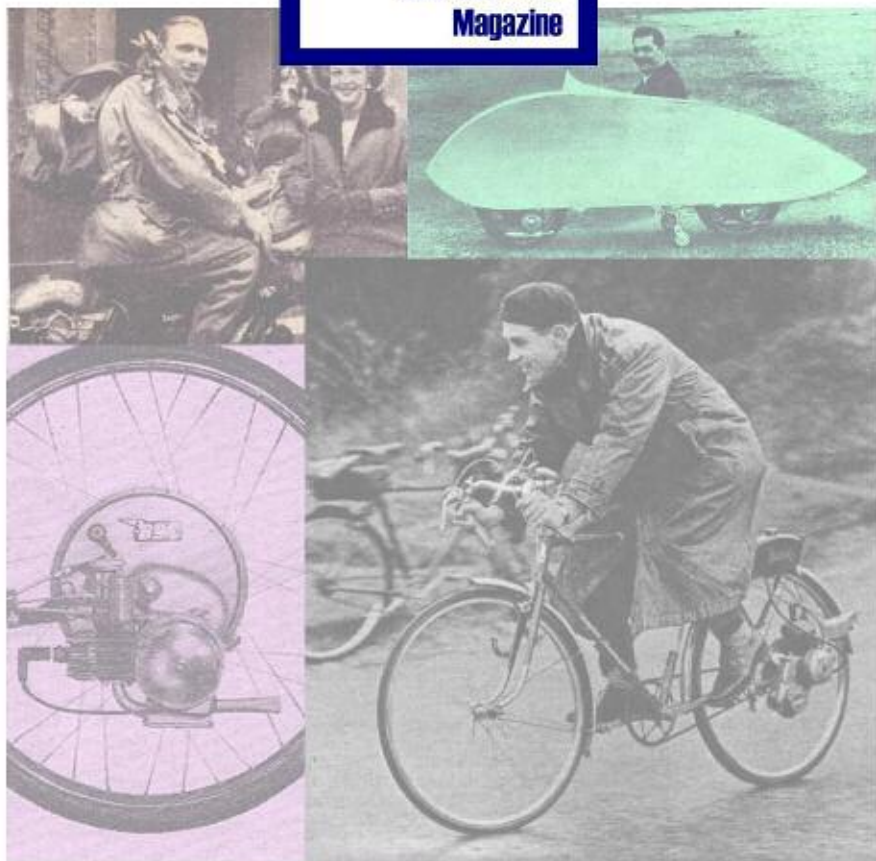
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