

## IX

### *The Best Way Is the Most Efficient*

Study the latest trick of the Olympic runners. It first came to the notice of American coaches in 1924, as they watched the queer motions of that brilliant British contestant, Harold Abrahams. He advanced up the track like a man stumbling and about to fall flat on his face. A sudden violent hoist of his knee barely saved his balance at each stumble. As one observer remarked, he managed to hold his nose to the ground over the entire course. To an eye habituated to the smooth beauty of the classic runner, Abrahams appeared clumsy, ugly, dangerous, and surely ill devised for victory. But the eye is wrong, Abrahams right. The new-fangled stride proves to be the most scientific method of making the most of leg energies. This is why our own Gene Venzke, the Pennsylvania runner who has broken the mile record, has adopted Abrahams' technique, with slight modifications.

Contrast it to the orthodox technique, and you will readily perceive the economy of energies. For generations uncounted, runners have been taught to fling the advancing foot as

far forward as possible with each lift of the advancing knee. Now, what happened? The advancing foot would meet the earth somewhat in front of the runner's body; hence it acted somewhat like a pole in the pole vault over which the runner had to drive his entire weight. In some measurable degree, then, he moved through a series of short arcs. At the beginning of each arc he had to lift himself upward; and every inch in that direction was an inch more or less away from the tape. Or, to put the same thing in simpler language, the foot that met the ground ahead of the body acted as a brief brake to the rectilinear forward motion of the body.

With the technique of Abrahams and Venzke, the leg motion is entirely different. The foot is raised but not flung forward in the orthodox manner at all. Instead, it is allowed to fall back to a position pretty much the same as that taken in ordinary walking. The result is obvious: the moving body keeps ahead of the forward foot, hence it is always falling, while the runner is always lurching forward to save himself from falling flat. In short, the body is catapulted more nearly in a straight line toward the tape, so that less energy must be expended in lifting oneself over a forward obstacle, namely the over-advanced foot. So, here as everywhere else, the best turns out to be the most efficient way.