



Charles H. Colvin, head of the Pioneer Instrument Company, the concern whose navigation devices, such as the earth inductor compass, make possible the epochal flights across the ocean. He is shown with a modern airplane's instrument board

Geniuses Who Created Planes of Air Heroes

Little Stories of Fokker, Colvin, Lawrance, Bellanca and Hall, and Their Contributions to Aeronautics

By H. A. BRUNO

HIGH above a New Jersey flying field a giant monoplane soared gracefully, its three motors roaring. In the cockpit sat a rather stubby man with ruddy face and genial smile—alone at the controls, and seemingly oblivious of a group of high Army and Navy officials who rode in the cabin as passenger-observers.

I chanced to be with the officers and overheard their conversation as they praised the new plane for its unusual stability. At an opportune moment I left my seat, and, stepping forward to the control compartment, repeated to the pilot what I had heard.

"Is that so?" he smiled. "Then I'll show them just how good she is!"

With that he opened wide the throttles of the three motors, and pulled the "stick" back into his stomach. I gasped as the nose of the machine rose high, and the great plane climbed straight up until it was literally hanging from the sky on its propellers!

BUT that was nothing to what followed. Cutting the ignition switches on all three engines, the pilot calmly released the controls, left his seat, and slid back into the cabin. There we were, riding the air in a plane that was pilotless and powerless! Amazement on the faces of the officers changed to dismay as the machine stalled, then slid tail first toward the earth. For a few sickening seconds it dropped; then, as if conscious of its own destiny, brought its nose down, leveled out and flew itself a little way. Again it started downward and again leveled out.



Donald Hall, 29-year-old engineer, who worked day and night to design Lindbergh's transoceanic plane in twenty days

Now the little man climbed back into the cockpit. Still smiling, he pushed the controls forward, and, as the machine nosed down sharply, threw on the ignition switches, starting the three motors. A wide circle of the field, and he brought the plane to earth for a perfect landing.

No more startling or convincing demon-

stration of airplane stability ever was attempted. Yet the man who performed the feat was no dare-devil flyer, nor even a professional test pilot. He was Anthony H. G. Fokker, designer and maker of modern airplanes. And the machine in which he did it—the product of his own ingenuity—was the first of a new line of monoplanes which later carried Commander Byrd to the North Pole and across the Atlantic; which transported Lieutenants Maitland and Hegenberger from California to Hawaii, and which will undoubtedly write many another brilliant page in the future history of aviation.

ANTHONY FOKKER is just one of a small group of hard-working men, to whose technical skill and passionate devotion to the science of flight we owe the recent splendid achievements in aviation. The names of the flyers—Lindbergh, Byrd, Chamberlin, Acosta, Maitland, Hegenberger, Balchen, Noville and others—have become household words. Yet how many of us know of those other, unsung heroes—dreamers and builders, creators of airplanes, engines and instruments that have done "the impossible"?

Fokker, Bellanca, Hall, Lawrance, Colvin. Do you know who they are and all they have done?

Come behind the scenes, if you will, and meet these five workers of marvels. Three of them—Fokker, Giuseppe Bellanca, and Donald Hall—are designers of airplanes. One, Charles Lanier Lawrance, is a builder of engines. And the fifth, Charles H. Colvin, is an inventor of aeronautical instruments. Together, they