

## Arthur Jones: Making millions by molding muscles

**T**here is an old riddle that asks, "Where does a 500-pound gorilla live?" Answer: "Anywhere he wants."

Arthur Jones, who is believed to be 60 (he won't reveal his age), is something like that gorilla. He lives where he wants and in just the style he chooses—and, having become a millionaire by inventing the Nautilus exercise machine, he doesn't much care whether you like it or not.

This is immediately apparent to anyone who visits his company headquarters in Lake Helen, Florida; he keeps 40 large crocodiles in an enclosure in the yard. But a trip to his estate, an hour's drive away, demonstrates Jones's eccentricity far more graphically.

There are, on the grounds: 33 baby elephants, 2 huge rhinoceroses, a gorilla (he lives in a trailer), a number of rattlesnakes (in glass-fronted terraria) and a 250-pound giant tortoise. A few hundred feet from the mansion's white-pillared porch, a 5,000-foot runway is under construction; it will be able to handle the three Boeing 707s he owns and flies. On the drawing board are a 58,000-square-foot airplane hangar and what he predicts will be the "finest, largest medical research center in the world." The draftsman is Jones himself, and he also designed the complex of office buildings—including state-of-the-art television studios—that make up the Lake Helen headquarters. Finally, to keep him company, he has Terri, a 21-year-old ex-model who is his fifth wife.

Jones forged his independent manner long before becoming a leading entrepreneur in the exercise-and-fitness industry. For over a decade, he stalked wild game in the African jungles and produced a television adventure program called *Wild Cargo*. Back in the United States in the early 1970s, Jones welded together the prototype Nautilus and called on skeptical health-club owners. Since then, Nautilus Sports/Medical Industries has grown dramatically. Nobody outside this very private company—except perhaps the Internal Revenue Service—knows for sure, but it's thought that annual sales total about \$400 million. Well over 3,000 Nautilus fitness centers are in business, and the machines are also in operation in hospitals, major-league locker rooms and college and school gyms.

The machine—or machines, since there are currently 40 different models, with more in the works—are based on a simple principle. "Man is a rotary beast," says Jones, meaning that our

limbs pivot at the joints. "Ordinary barbells produce resistance in a straight line to this rotary form of movement."

Jones did years of research, visited dank exercise gyms and worked with well-known bodybuilders in the process of designing the first Nautilus. Out of this, he came up with the two innovations that make the machines so successful.

First, Nautilus takes advantage of the way bodies work. Since limbs rotate in a circular motion around joints, each machine's pulling, pushing or lifting bar rotates, via a metal arm, around a central pivot. Muscles are always pulling at right angles to the resisting force; as a result, they're always working as hard as they can.

Second, Jones didn't use an ordinary pulley to transfer force from the machine's hanging weights to the resisting bar. He invented a kidney-shaped pulley similar in design to a nautilus shellfish. As the pulley rotates, its effective radius changes with the angle of the "kidney," varying the resistance exerted. Muscles work hardest when leverage is optimum; they work least hard when it's not. The result: Muscle tension is constant, without the sudden jerks that characterize ordinary weight training.

These days, Jones scorns those who criticize the machines for being one-sided in their benefits—emphasizing muscle development at the expense of cardiovascular conditioning. A study at the U.S. Military Academy at West Point, however, showed that significant cardiovascular improvement is possible using a Nautilus.

**T**wo scaled-down versions of the Nautilus machines for the abdomen and lower back are Jones's latest inventions. They've been redesigned for exclusive use in the home. Other projects in the works include the development of a diagnostic tool for lower-back problems, to be used in doctors' offices; and a computerized machine for hospitals that would provide data on serious injuries.

Even with all these new schemes, Jones is cynical about how his dreams will be greeted by others. At breakfast one morning, he took a napkin and wrote down his estimate of how the world reacts to any new idea or a man with vision: Ignore. Ridicule. Attack. Copy. Steal.

Nevertheless, Arthur Jones perseveres with a vengeance.

—Anthony Liversidge



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