

David Ross

Ingenious and generous, he enriched the University in countless ways

David Ross was born near Brookston in 1871, when Purdue University existed in name only.

John Purdue, as a life member of the Board of Trustees, at the time was haggling with Chauncey landowners to find land suitable for the new college that would bear his name.

David descended from an early Lafayette family. His grandfather came east from Pennsylvania in 1827, just two years after Lafayette was platted. He later opened a dry goods store and was a contemporary and competitor of John Purdue.

David's father, George, took up farming on a tract of land in White County.

When it came time for David to consider college, he chose the fledgling institution that in 1889 boasted an enrollment of about 250.

His father was adamant that college was a waste of time, that David knew all he needed to know to be a good farmer. Only through the persuasion of George's brother, Will, was David allowed to enter Purdue.

Ross pursued mostly electrical engineering courses, although when he graduated in 1893, Purdue did not yet grant electrical engineering degrees, so he was listed as a mechanical engineering graduate.

Ross spent a quiet four years at Purdue. At the end of his senior year, he was mentioned in "The Exponent," at that time the monthly college paper. In the annual column about the possible fates of graduates, it said: "Ross will electrify Brookston."

Late in the 1890s, Ross did help provide the first telephone service to Brookston as a founder of the Prairie Telephone Co., but his electrifying would be on a much grander scale.

The automobile first was coming into use when Ross graduated from Purdue. That same year, Henry Ford demonstrated his first car.

Although Ross returned to the farm, as he had promised his father he would, he took a great interest in cars — not so much owning them as improving them.

By 1905, Ross was creating devices in the farm shop based on ideas he had gathered from reading technical journals.

He applied for patents on three working parts — a differential gear mechanism, a gear-shifting device and a rear-axle differential — and got them.

At about the same time, he came up with the first of a number of patentable steering gears.

It was this gear that caught the attention of a Cleveland manufacturer. Ross was invited to Cleveland to further develop the gear.

For the second time in his life, his Uncle Will would intervene in a Purdue history-changing way. He convinced Ross not to sign away the rights to his device and rather to stay in Lafayette.

In 1906, the Ross Gear and Tool Co. was formed. It remains today, now part of TRW Commercial Steering.

Ross patented 88 devices, most related to automobile steering and building structure and materials.

But his inventiveness went well beyond mere inventions.

"There's scarcely a thing we do that can't be done better," Ross once said.

It was his passion for improving his world that led him back to his alma mater.

Beginning just after World War I and lasting until his death in 1943, Ross improved the University in countless ways. It can't be told at once briefly and completely. But six examples of his work for the betterment of Purdue give an idea of his impact: the Memorial Union, Ross-Ade Stadium, faculty pensions, the Purdue Research Foundation, the Purdue Airport, and the Ross Civil Engineering Camp.

> Ross' reappearance at Purdue can be traced to 1920, when he was asked to serve on an alumni committee that since 1911 had been trying to raise money for a student union.

When Ross joined the committee, \$50,000 had been collected. Largely through his efforts, more than \$500,000 was raised by the time the first part of the Memorial Union was completed in 1922.

> By happenstance, the General Assembly in 1921 had passed a law requir-



ing that universities have at least three alumni as trustees.

Ross was voted in as the first alumni trustee that same year.

While out raising money for the Union, Ross encountered considerable anger among alumni that while other universities were building grand stadiums, Purdue still used modest Stuart Field along University Street, since the early 1890s the athletic complex.

Ross arranged a meeting with George Ade, humorist, author, playwright and a member of the Class of 1887. Ross proposed that they buy an old 65-acre dairy farm north of campus and make initial contributions toward building what is now Ross-Ade Stadium.

> In the late 1920s, it came to Ross' attention that no provision had been made for pensions for faculty, deans and seniors administrators. He donated more than 4,000 Ross Gear and Tool shares. The proceeds from the sale — \$380,000 — formed the nucleus of a pension fund.

> Ross always admired the research breakthroughs that came out of the Agricultural Experiment Station, as well as the practical advice farmers received from the agricultural research.

In 1926, when he was vice president

of the Board of Trustees, Ross organized a conference of industrial leaders at Purdue with the purpose of starting a parallel organization to educate graduate students and conduct research to benefit business and industry.

In early 1927, the Board of Trustees appointed a committee to study "certain aspects of the problem of technical training and industry."

In late 1927, the committee rendered a report that stated, in part, "the vital importance to Purdue University of carrying on research and experimental work, its advantage to outstanding students, to the faculty, [and] to the industrial interests of the state."

In 1928, trustees authorized employment of a "counsellor for industrial research or director of research relations with industry," and in 1930, the Purdue Research Foundation was formed. The initial fund backing research was \$50,000 — \$25,000 each from Ross and fellow trustee Josiah Lilly, son of Eli Lilly.

> Also in 1930, Ross was talking with Andrey Potter, dean of engineering from 1920 to 1953, about his needs for aeronautical engineering.

Potter told Ross that what the University needed was its own airfield.

> Before the rise

This turn-of-the-century photo of Ross was taken after he helped install the first telephone service to Brookston, Ind., as an owner of the phone company there. It was about this time that he was tinkering with ideas for improving automobiles. These ideas in 1906 would be the nucleus of the Ross Gear and Tool Co., now part of TRW Commercial Steering.



< Faithful trustee

When this photo was taken in October 1930 on the back steps of old Eliza Fowler Hall, Ross had been president of the Board of Trustees for three years and would serve in that capacity until his death in 1943. Trustees gathering for the October 1930 meeting would discuss an idea that had been brewing for several years — primarily a Ross brainstorm — a foundation that would provide graduate fellowships, fund research useful to industry, and provide flexibility in buying and selling property. At the December meeting, the trustees approved the idea as the Purdue Research Foundation, capitalized with \$25,000 each from Ross and fellow trustee Josiah Lilly, son of the founder of Eli Lilly and Co.

The trustees were: (front row left to right) Ross; Virginia Meredith, for whom Meredith Residence Hall is named; John Hillenbrand, who along with his son — later a Purdue trustee — is the namesake of Hillenbrand Residence Hall; James Noel, Purdue Class of 1892; J. Emmett Hall, Purdue Class of 1906; (back row) James Kimbrough; Lilly, for whose family Lilly Hall of Life Sciences is named; Mary Williams, secretary of the board; Palmer Edgerton, Purdue Class of 1906; and Robert Simpson. Edward Elliott, Purdue president from 1922 to 1945 for whom the Hall of Music is named, is farthest right in the second row.

A few days later, Ross stopped by to pick up Potter and take him on a ride to a parcel of land he had an option to buy.

"I will buy it and give it to Purdue if you think it is what you want," Ross told him.

> Another time Ross wanted to talk with Potter, but he was away at the surveying camp in northern Michigan used by civil engineering students.

When he returned, Potter lamented having to go to Michigan to practice surveying.

A few days later Ross called and asked Potter to take a ride.

He drove Potter south of West

Lafayette to a tract of land overlooking the Wabash River.

"I am going to buy it," Ross told Potter. "I want my home in this section and I will buy this section for the surveying camp for Purdue."

The camp was used not only for surveying but also a practice facility for the football team, and later as the site for

statewide 4-H activities. The land now is a county park named for Ross.

As generous as he was ingenious, Ross adopted the University in a way no one had since the days of the founding and no one has since.

Many of the patents — and the accompanying income — he assigned to the University. His material gifts to Purdue are difficult to track because he gave many anonymously. A conservative estimate of cash, stock and land would exceed \$3 million, a figure even more astounding considering that Ross' peak earning

years were in part dominated by the Great Depression.

John Purdue stands alone as the private citizen without whose actions the University we know today would not exist where it is.

Ross stands alone as the private citizen whose actions sustained and propelled the University — from taking an active role in the drive to raise money for the Memorial Union to leaving most of his estate to Purdue. If he knew of a need of the University, he saw to it the need was met.

STORY BY JAY COOPERIDER

PHOTOGRAPHS BY DAVID UMBERGER AND COURTESY OF J.C. ALLEN ARCHIVES AND SPECIAL COLLECTIONS



> Dreamer

A number of Purdue people got together on what eventually became known as the master plan for campus development, among them architect Walter Scholer, civil engineering Professor George Lommel, engineering Dean Andrey Potter, trustee David Ross and President Edward Elliott. But it was Ross and George Ade who determined in a general way the direction of the growth of campus.

About 1920, even before Ross had been elected by alumni as a trustee, he was eyeing land well north of campus as a site for a stadium and athletic complex. When in 1922 Ross and Ade bought and donated the land for the athletic plant, it presented a new problem: how to tie together the old campus and the new athletic complex. Scholer, at that time a partner in a Lafayette architectural firm, was retained first informally by Ross, and later officially by the Board of Trustees. His task was to conceive a master plan that linked the old — Stanley Coulter Hall was the academic building closest to the Ross-Ade land — and the new.

The plan was completed in 1924. Older buildings were shown on the plan in gray, proposed buildings in black. Scholer's plan called for a central mall — with a winged building on a circular drive in the present-day location of Hovde Hall. Proposed building additions to the Memorial Union and the original library — now part of Stewart Center — came to fruition. The growth of campus from the Memorial Mall, then known as the Oval, toward Stadium Avenue, then Seventh Street, has closely followed the plan originally conceived 75 years ago by Ross.

< 'I wish I might always come here'

At one time, Ross, President Edward Elliott and other Purdue planners envisioned the Purdue Research Foundation as an institution that worked in concert with the University but located away from campus. For that reason, Ross bought and donated land now occupied by fraternity and sorority houses, Slayter Center of Performing Arts, and part of the South Golf Course. Friends said he was happiest on a knoll on the donated land overlooking campus. In the biography, "David Ross, Modern Pioneer," Ross is quoted as telling a friend: "I'm hoping the time may never come when I'm not identified with Purdue. Call it sentiment, vanity, or whatever it is, but I'd like to be buried where it will be evident that a fellow named Dave Ross had [something] to do with the University ... when the time comes, please make my desire known. Now, understand, I don't mean that I should be on the original campus. That honor belongs to John Purdue. But perhaps an appropriate place might be found." The epitaph on his grave, left, reads: "David Ross, 1871-1943. Dreamer. Builder. Faithful Trustee. Creator of Opportunity for Youth."



< Builder

When David Ross was elected by alumni as a trustee — the first trustee so elected after a 1921 state law was passed calling for alumni representation on boards of university trustees — he took seriously the complaints of alums who said athletics were given short shrift by Winthrop Stone, Purdue president from 1900 to 1921. One of Ross' first acts was to join forces with George Ade, author, playwright, humorist, member of the Class of 1887 and a former Purdue trustee. The pair bought the old Tilt dairy farm north of campus for \$40,000 and donated the land and further donated money to build Ross-Ade Stadium. Dedicated Nov. 22, 1924 with a seating capacity of 13,500, the stadium has undergone six expansions and renovations. The Boilermakers won that inaugural contest, prevailing 26 to 7 over the Indiana Hoosiers. In the July 1924 photo at left, the tower of old Heavilon Hall is visible in the background.

Ross-Elliott-Potter-Stewart era well-documented

Biographies and history books about the University served as the basis for this installment of "Purdue Legends: A Look Back." The sources include:

✔ "David Ross, Modern Pioneer," a biography by Fred Kelly.

✔ "The Dean," about Andrey Potter, engineering dean from 1920 to 1953, by Robert Eckles.

✔ "Edward C. Elliott, Educator," a biography by Frank Burrin.

✔ "R.B. Stewart and Purdue University," a biography by Ruth Freehafer.

✔ "Fifty Years of Progress," written about the first half-century of the University in 1924 by William Hepburn and Louis Martin Sears.

✔ "Purdue University, 1922-1932," a book written in 1933.

✔ "The Trustees and the Officers of Purdue University, 1865-1940," by Thomas Johnston and Helen Hand.

David Ross left most of his personal effects and papers to the University, and those served as an invaluable source for information. They are on file in Special Collections in Stewart Center.