

## Men and Jobs



**D. B. Steinman: He knew what he wanted.**



**"There were many disappointments..."**



**"But life's been too wonderful..."**



**"I'm through fighting."**

## What Measure for This Man?

"The world makes way for the man who knows what he wants," says David Barnard Steinman, "provided he is willing to make the necessary sacrifices."

Last week, the world saw 73-year-old Dr. Steinman—many sacrifices behind him—honored anew by the National Society of Professional Engineers for his work in founding it (see p. 23).

For this designer of many notable bridges, this latest honor—heaped upon others—was received with the same apparent joy that his first public recognition must have brought decades ago.

For Steinman the scientist, mathematician and engineer, life has been full—full of disappointments and frustrations as well as of recognition and financial rewards.

For Steinman the author, poet and

humanitarian, the rich rewards of accomplishment still abound.

Recognition, he has sought and found. The world did, indeed, make way for the poor but brilliant youngster from New York City's lower east side.

Sacrifices he has faced and made. None leaves any outward mark of bitterness; all are recalled with apparent equanimity.

The great disappointment of his life has been denial of what he calls "the focus of my life ambition." His dream project, the Narrows Bridge in New York City, is now being engineered by others. The ambitious young Steinman began designing that record span suspension bridge in 1926, and spent 30 years promoting it. His effort was sacrificed.

But loss of affection among contemporaries may be the greatest of his sacrifices, for D. B. Steinman's personality has not been one to take or leave. He has made enemies as well as friends, and he is a man who wants very much to make friends.

The Steinman story has been written again and again. It is down in bare facts as one solid page of *Who's Who* in Engineering (in fact, it spills over three lines into a second page). Elsewhere, it piles up in the millions of words of biographers, citation writers, journalists—and of the man himself.

But what does it add up to? What will his contemporaries remember him for? What has been his most significant, lasting contribution?

Would it be the mighty Mackinac

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... Men and Jobs

## ... "I put off earnings for fighting

Bridge, longest suspension bridge from anchorage to anchorage in the world? Would it be Brazil's Florianopolis Bridge, built back in the Twenties and still South America's outstanding suspension span? Would it be his Europe-to-Asia bridge soon to be constructed across the Bosphorus in Turkey?

Would it be "The Builders of the Bridge," his book on John and Washington Roebling and that boyhood inspiration of his, the Brooklyn Bridge, which they built? This labor of love was written at considerable sacrifice of time and effort, but the 65,000 copies already sold have taken its author's name around the world. It was published in German last year.

His book for juveniles, "Famous Bridges of the World," may be a part of his contribution, and so might be his paperback, "Bridges and Their Builders." "I Built a Bridge—and Other Poems" or his forthcoming volume of poetry, "Song of a Bridge Builder" or books being published about him, "The Long Crossing" or "Highways Over Broad Waters," might give some hint to his real contribution. But what is it?

"I count NSPE one of the achievements of my life," he says. But is this national society of 50,000 professional engineers—he called 24 men together to found it 25 years ago today—his real contribution? Or will he be remembered for the tireless efforts in the years after 1934 as he personally campaigned up, down and across the country for passage of professional engineering registration laws, for formation and strengthening of state societies and for their members to join his NSPE?

"In depression years," he recalls, "I gave 99% of my energies . . . neglected my practice . . . gave time, money, secretarial help . . . traveled thousands of miles preaching the gospel to engineers and legislative leaders. I made enemies, but got enough friends to push the movement ahead." Is this the Steinman effort for which friends and enemies alike will remember him?

Or was it another speech-making campaign when he barnstormed the country a bit later? He told and demonstrated how and why the Tacoma Narrows Bridge became unstable in the wind, tore itself apart and earned the name of "Galloping Gertie." To this day he says, in a matter-of-fact way, that he "could have saved the Tacoma Narrows Bridge."

However valid, this claim did not and does not endear him to contemporaries who had a part in the investigation of this historic bridge collapse. Nor, ap-

parently, did they endear themselves to him. As he recalls, he had to fight to get papers published on his methods of design to avoid aerodynamic instability in suspension bridges.

"All my competitors were on a committee to investigate the collapse and I was scrupulously left out," he says. "Channels of information were closed to me—and channels of publication." It's said somewhat sadly, but unexcitedly and without bitterness. The Doctor's doctor told him to avoid arguments after heart trouble six years ago. He's "through fighting."

But was his work on the aerodynamics of bridge design his major contribution? He says his writings when finally published were attacked. Was he ahead of his time in this area?

A structural problem he faced and helped solve in 1929 may have helped distinguish him. On the Mt. Hope Bridge in Rhode Island, heat-treated wire was used in the suspension cables for the first time. It was nearing completion (and the Ambassador Bridge in Detroit was well started using the same wire) when many strands were found breaking at the strand shoe in one anchorage.

Work was halted. Both bridges were dismantled and rebuilt using the usual cold-drawn wire; and Designer Steinman distinguished himself by helping to record fully and promptly the findings of this unfortunate experience.

How should his activities or membership in 155 different organizations (many honorary) be used as a measure of this man? Besides NSPE, he was president of the nearly forgotten, but still-surviving American Association of Engineers, president and founder of the American Toll Bridge Association, chairman of the U. S. Council of the International Association of Bridge and Structural Engineers, president of the International Society of Professional Engineers (Paris). Beyond this his associations are too numerous to mention.

And so are his honors. The honorary degrees now total 20—plus his earned B.S., A.M., C.E. and Ph.D. The miscellaneous medals, citations and awards seem innumerable.

The youngster who attended the College of the City of New York at age 13, while also attending high school classes at night, graduated in 1906 summa cum laude.

But will his great capacity for association work, his uncounted awards of recognition or the fact that he was a prodigy who became the "youngest professor in the country" at the University

## causes," says D. B. Steinman

of Idaho in 1910 figure prominently in his contribution?

Or will his great contribution be the poetry, which he began writing as a hobby some eight years ago? Inspired by those who told him his bridges were poems, he "decided to take the next step" and has already accumulated about 60 awards for his poetry.

His relationship to his employees might be an outstanding facet of "The Doctor." They call him generous, thoughtful, receptive, ethical, quixotic, brilliant, warm, human, a team man and character-builder. Says he, "All the men are my brother engineers."

His firm now runs easily without him as he takes a much less active part. His chief associates, all with him many years, divide the projects among themselves (or join forces for a big job such as Mackinac) and work as fairly independent operators.

He says his practice barely broke even most years until the Fifties. "I put off earnings for fighting causes," he says. But today it runs much better, readily covering a million-and-a-half in operating costs annually and returning a good profit.

Maybe his methods of promoting professional engagements were a contribution. He would do considerable engineering on a proposed bridge in hopes of some day getting to design it in detail and see it built. There is a printed list of projects on which he has worked. It includes a category of 41 "proposed" bridges. The Narrows Bridge, of course, is among them.

It's hard to say how many of his claimed 440 bridges assignments he personally promoted for his office. In recent years he has had others on his staff to seek business. But in the Twenties he traveled the country locating sites for prospective toll bridges. His competitors have found him "everywhere" as they and he have traveled in the quest for engagements over the years.

He says he found it difficult getting work in from state highway departments. "I didn't know and don't want to know the political ropes."

Will his David B. Steinman Foundation distinguish him? Through it, he has given \$400,000 to educational institutions, including 30 major schools. His money encourages teaching of the arts as well as engineering through visiting poet services set up at four universities. A grateful St. Lawrence University has set up an annual D. B. Steinman Festival of the Arts. He has always preached the well-rounded personality for engineers.

His 24 books, his poems, his lectures, his bridges, his frequent thoughtful words or letters of encouragement or congratulations to friends or mere acquaintances—all these things bring him fan mail from around the world. School children sometimes make it a class project to write him. "The mail that thrills the most is from the children," he says.

Is this some of the measure of the man?

Perhaps so.

Perhaps his greatest contribution will some day be judged to be his public relations effort.

Perhaps his success in identifying himself with civil engineering, and engineering in general, has been his greatest accomplishment. For in this role, which is criticized by many, he has made himself and engineering known to the public.

Who has done more in this regard? Herbert Hoover? The late Charles Kettering?

For a lifetime, D. B. Steinman has identified himself with his profession and labored for it. He identified himself, indeed integrated himself, with his profession so thoroughly that it would be difficult to say what effort he puts forth for self and which for his profession. He and his critics may have views 180 degrees apart on this, but few would deny both he and the profession have gained by his effort. As he says, "No true effort is ever wasted," and his efforts never cease—whatever his project of the moment.

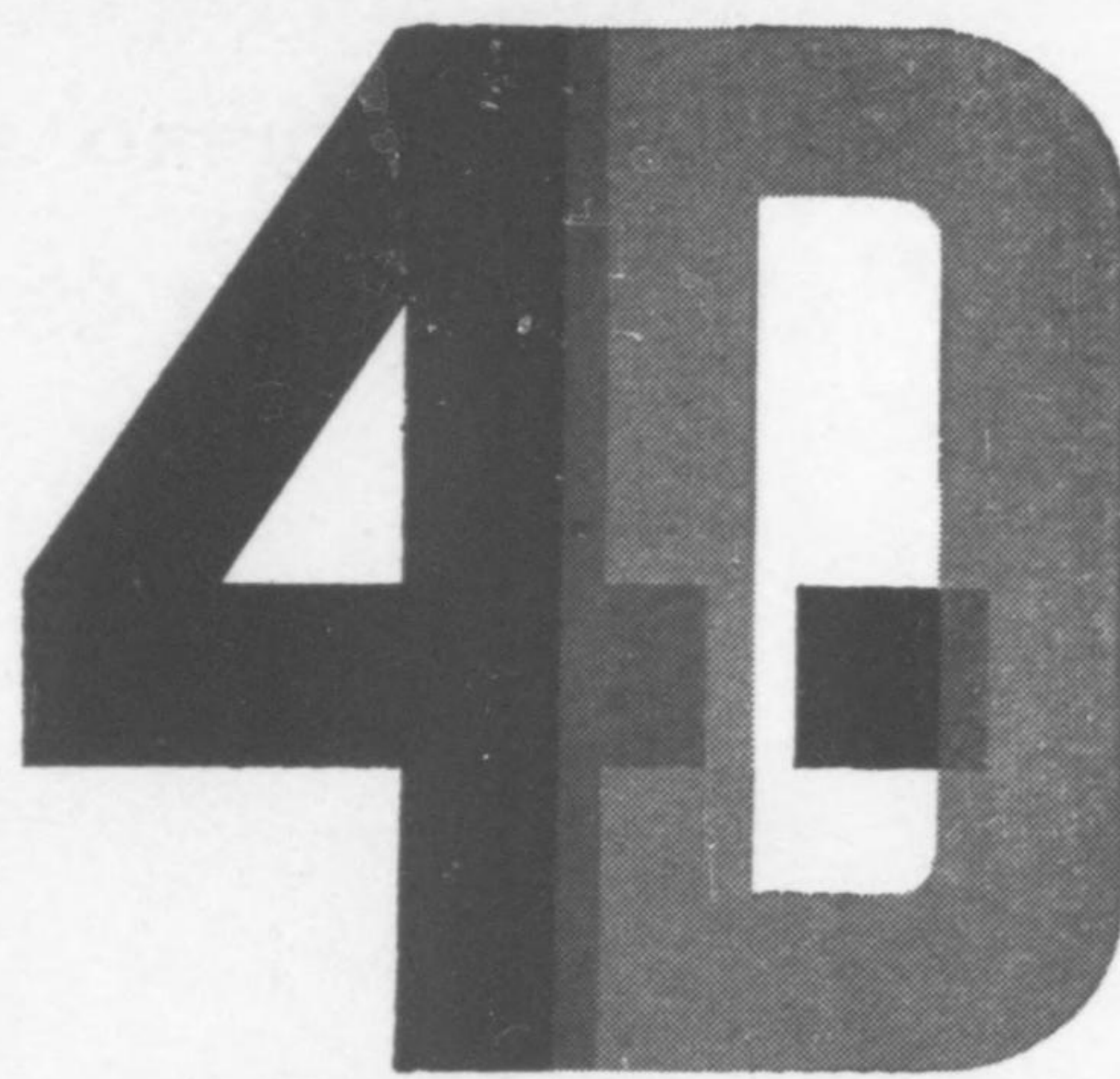
His "publicity" is a veritable snowstorm, giving shivers to those fellow professionals who frown on such endeavors.

His apparent need for the security of ego-satisfaction is a predominant facet of the infinitely complex Steinman personality and another feature irksome to many contemporaries.

Editorial offices for years have been on the receiving end of the Steinman mail—poems, itineraries, news releases, pictures. Said one ex-editor last week, "one out of one hundred was usable." Said another editor and admirer of the man: "I've thrown a lot of Steinman stuff in this circular file (his waste basket), but I wouldn't put Steinman there."

One long-time associate of his said it well when he called David B. Steinman simply the "interpreter of his profession to the public."

This, perhaps, has been his major role, the one for which he'll be remembered.



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