

Gene Garfield takes on the world

When Philadelphia banks turned down Garfield's 'chicken coop' business 20 years ago, he went to Household Finance. Last week the ISI president broke ground for his \$6.5 million international headquarters at the University City Science Center. Here's how he did it.

LAST Tuesday afternoon Dr. Eugene Garfield, founder and president of The Institute for Scientific Information, a Philadelphia-based information services firm with offices here and in 12 other cities worldwide, broke ground with a silver shovel for ISI's new headquarters building at the University City Science Center.

It will be ISI's fourth headquarters building since Garfield founded the firm with \$500 loans from Household Finance Co. almost 18 years ago.

To be completed next October, the new four-story, \$6.5 million building at 3501 Market Street will house all of ISI's 300 Philadelphia employees who now either work in the Mall Building at 325 Chestnut Street or at its data processing operation in Pennsauken, N.J., plus another 50 persons that ISI expects to add to its payroll here between now and then. It will also be home-base for ISI's remaining 180 employees in the rest of the world as well.

Of the \$6.5 million that the Venturi and Rauch-designed, 132,000 sq.ft. building will cost, some \$2.8 million is coming from the Pennsylvania Industrial Development Authority. Other financing is coming from The Fidelity Bank here, one of the big Philadelphia banks that had turned Gene Garfield down almost two decades ago when he first went around town trying to get conventional financing for his innovative scientific library researching service.

Man on his own

ISI today is still a privately-held firm, with its founder still the majority stockholder. Garfield said last week he expects sales for all of ISI's science digest-type products to be in excess of \$14.5 million this year, up nearly 15% from the \$13 million the company took in last year. Approximately 50% of sales come from outside the United States.

It was not always so. Back almost 25 years ago in 1954 when Gene Garfield came to Philadelphia as a library research consultant to Smith Kline & French Laboratories (now SmithKline Corp.), the 28-year-old graduate student with a Master's Degree in Library Science from Columbia University in New York (and later a Ph D. from Penn.) had already acquired some publishing experience. He had previously been

founding editor of "Contents in Advance," a small digest of scientific information compiled from assorted journals. That publication reached "a few hundred subscribers," Garfield says, but failed after its first year for being "ahead of its time at the time." But Gene Garfield had learned two lessons from that first experience.

Money up front

"I recognized that publishing was one of only a few industries where the customer was willing to pay for the product before he had the product in hand," he recalls.

But, before that first phenomenon of getting your money up front took effect, Garfield had also learned "I always needed money to pay the printer" plus his rent and other office expenses. In other words, he also needed seed money to get a few initial issues of his new publication into subscribers hands so the subscriber might see what he was paying in advance for.

The 25-year evolution of Gene Garfield's "Current Contents," the flagship booklet that ISI today publishes in six different weekly editions (Agriculture, Biology & Environmental Sciences; Social & Behavioral Sciences; Clinical Practice; Engineering, Technology & Applied Sciences; Life Sciences; and Physical & Chemical Sciences) illustrates the idea.

Like its predecessor, "Contents in Advance," Garfield's "Current Contents" began as a digest of article-titles and authors of all the articles published in the journals of the same field. At SK&F, as at the Johns Hopkins Medical Library earlier, Garfield had worked to catalogue the latest developments in each specialty, pharmaceutical or medical, indexing them later with related developments in the past through the use of computers. At giant SK&F, for instance, when the Philadelphia firm wanted to pursue a new research project on some new drug, it needed to know what else was being done by others in that field—not to mention what else big SK&F itself had already accomplished on the same subject.

The chicken-coop office

About that time, also, Bell Laboratories up in Murray Hill, N.J., offer-

ed Gene Garfield a contract to produce a contents-page service for its laboratory staff on the journal literature of management. Previously, Bell had been trying to run such a service for itself.

Still recalling his experience with "Contents in Advance," Garfield had his Bell contract written so as to market the service commercially elsewhere. For Bell, it was called "Survey of Current Management Literature"; elsewhere it was sold as "Management's Documentation Preview." Garfield set up a company he called Documation Inc. in Woodbury to produce and market it.

About this time Garfield began to realize he was going to need more than pocket money if he hoped to be a commercial success. Until then, he and his wife had "rented a Xerox platemaker, and a Davidson small office press and printed loose-leaf pages in a converted chicken coop" down in Woodbury, then their home.

But getting money enough to pay for a professional printer—even with a signed Bell Labs contract in hand for collateral—wasn't so easy, Garfield recalled last week.

"I tried the banks in Woodbury and Philadelphia, including Fidelity. But no bank wanted to loan out for less than a



month." So, even though interest rates on consumer finance company loans were higher than bank loans, but because he could pay back his small borrowings—"sometimes as little as \$500"—he needed often in less than a week, Gene Garfield walked into a nearby Household Finance Co. office.

Into the big time

He needed these "bridge loans" to pay the printer. Then he would take his newly minted digests around by hand to subscribers. And, as soon as those subscribers started to send their money in for their latest issue, he would head straight back to Household Finance to close the bridge.

"I usually had to suppress an urge to call up Bell Labs after I'd gotten back from there to see if they wouldn't pay a little early," he recalled last week.

Although his Bell Lab contract was to last eight years, outside sales didn't seem to want to take off. Gene Garfield had higher hopes for commercial success. Acting on professional marketing advice, he then changed his company's name to Eugene Garfield Associates and the name of the service to "Current Contents."

About this time, also, Garfield began

to work on his notion that other pharmaceutical firms might indeed be interested in, if not eager to duplicate, a service similar to the one he was performing for SK&F. As it happened, the medical librarian at Miles Laboratories heard of Eugene Garfield Associates and asked the young firm to produce a contents-page service for the medical and pharmaceutical literature there.

"This request led to the development of 'Current Contents/Life Sciences,'" wrote ISI vice president Samuel Lazerow for a company history three years ago, "which was to become the most heavily used current-awareness service in the scientific world."

This introduction of "Current Contents/Life Sciences" marked two other milestones in the evolution of Gene Garfield's company, Lazerow points out. The first was it brought Garfield to the commercial level where he needed to hire another professional researcher to help with that work—"the first step in building an organization."

And, two, it also provided a deeper business base "strong enough for him to afford to take some commercial risks on advanced ideas" that could not be entertained by non-profit groups in the same business.

The key to knowledge

Among Garfield's advanced ideas, the one that stands out today is ISI's "citation indexing" service. Citation indexing uses the references found at the

Last week Garfield led the groundbreaking for his firm's international headquarters at the Science Center. ISI 'logs in' some 5,800 journals a year at its 325 Chestnut Street offices.

bottom of each journal page, or back in the bibliography, as indexing terms for the computer. All requests that flow into ISI's seven floors at 325 Chestnut Street today for the latest information on "acne," say, can thus be answered by keying its computer program for that disease. Then, "retrospectively searching" the 1,000 medical journals that ISI takes every year, the computer prints out all the articles that have been done on the subject in the past month, past year, past decade, etc., depending on how far back the query wants to go.

"Current Contents" used to cull its listings from some 100 technical/scientific journals at the beginning. Today ISI receives some 5,800 professional journals encompassing many scientific/technical disciplines at least once a year, with most arriving quarterly. According to Thomas G. DiRenzo, ISI communications vice president, most of these subscriptions come "voluntarily" for the prestige of being considered for an ISI listing.

As each journal arrives, DiRenzo adds, it is "logged in" at 325 Chestnut to show it has entered into the ISI system; then its table of contents is removed for editing. Every pertinent item must be examined by a professional cataloger to determine whether it should be coded for later addition to the computerized data base over in Pennsauken.

Over 500,000 articles

This process involves coding each significant item to show what category it fits into, to identify each of its references, to code titles that must be translated into English, and editing all titles, author-names, organization names and addresses. Editing time per journal varies from half-an-hour to three days. ISI adds over 500,000 new articles to its data base every year, work that requires a team of 60 data-entry operators on two shifts in Pennsauken, five days a week all year round.

As a continuously growing firm tied to the worldwide scientific community, ISI's future fortunes in its new headquarters building at University City Science Center might seem assured. Indeed, while most of his 300-area employees watched in admiration last week as the long-haired president in the pumpkin-orange shirt and iconoclastic-brown suede suit dug a few extra holes for the benefit of media cameramen, Eugene Garfield looked the picture of contentment.

And, when asked what was the early secret of his success back in the beginning, 25 years ago, Gene Garfield later replied, "Don't be afraid to take chances when you're young."

"The time to lose money is when you haven't got any." □

