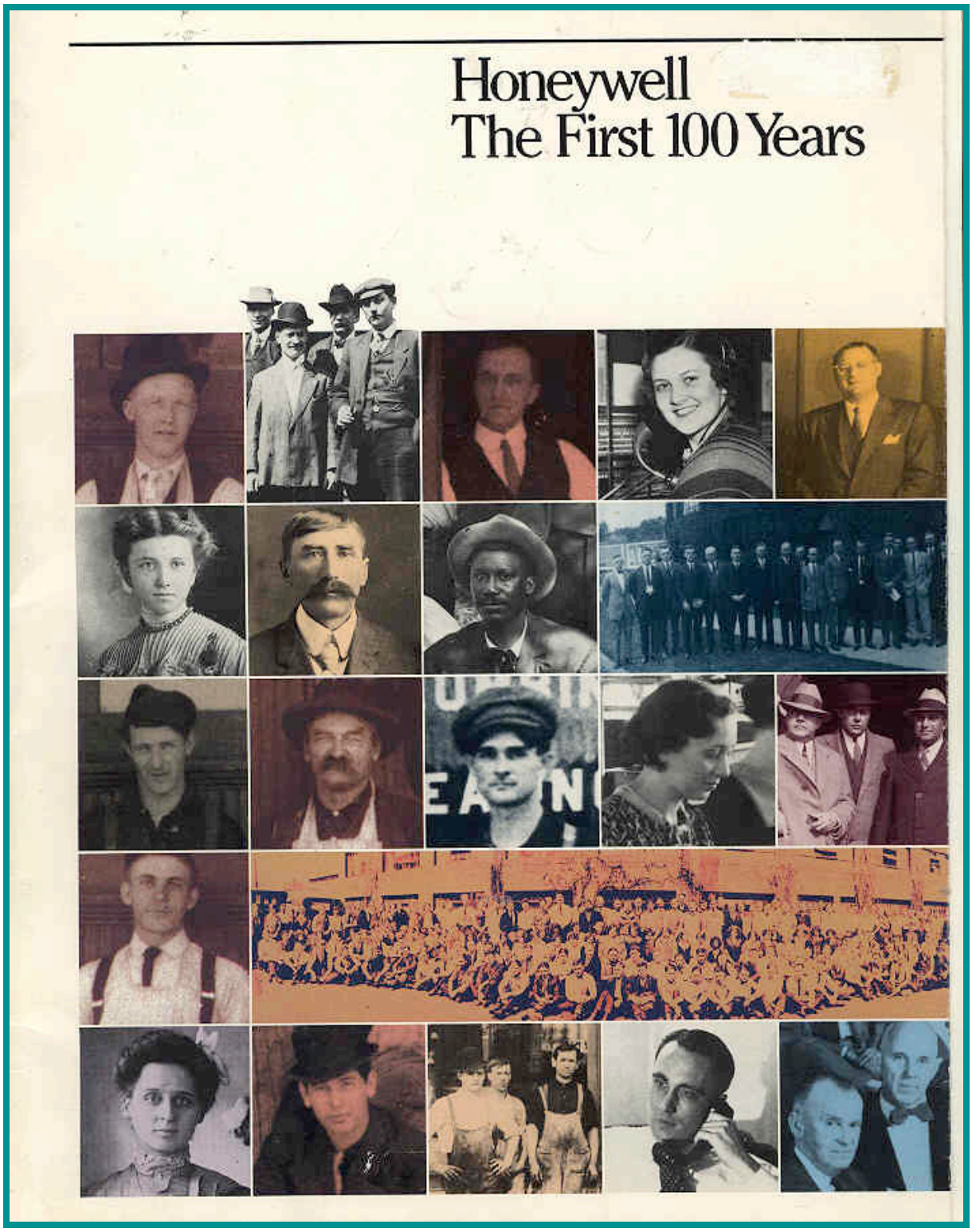

Centenary brochure 1885-1985

Honeywell Highlights

1885 1895 1905 1915 1925 1935

1885
Albert M. Butz files with U.S. Patent Office for his first temperature control patent. He forms the Butz Thermo-Electric Regulator Company.

1895
One of the company's earliest advertisements appears in the February issue of *Century* Magazine.

1893
The company is reorganized and the name is changed to Electric Heat Regulator Company. William R. Sweatt is named secretary-treasurer.

1898
Original investors turn over the company to W.R. Sweatt for $5,000. The money is paid out of earnings at $25 per month.

1906
Mark C. Honeywell founds Honeywell Heating Specialty Company in Wabash, Indiana, to manufacture a hot-water system to heat homes.

1912
Having outgrown factories in a shed, a barn and a converted skating rink, Minneapolis Heat Regulator Co. erects a plant and office building. The structure is still part of the General Offices complex.

1913
Harold W. Sweatt joins Minneapolis Heat Regulator Company.

1919
Sales exceed $1 million for the first time.

1920
Yamatake Trading Company is appointed agent for Brown Instrument Company in Japan.

1927
Minneapolis Heat Regulator Company merges with Honeywell Heating Specialties Company.

1930
The company forms its first office outside the United States, Minneapolis-Honeywell Regulator Company, Limited, in Toronto, Canada.

1934
Honeywell acquires Brown Instrument Company of Philadelphia, Pennsylvania, founded in 1859.

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1935 1945 1955 1965 1975 1985

1936
Subsidiary company established in Great Britain.

1941
Experiments in electronics lead to development of the first successful autopilot. Honeywell enters the commercial aviation field.

1942
Prototype of the Honeywell Round thermostat. Manufacturing was deferred for war effort and first production models were introduced in 1953.

1950
Honeywell purchases Micro Switch of Freeport, Illinois, manufacturer of a line of snap-action electric switches.

1954
Research laboratory develops germanium power transistor. Transistor Division is formed in Minneapolis.

1957
Honeywell buys Ratheon's 40 per cent interest in Datamatic Corporation and creates the Datamatic Division to produce the D-1000 computer. The first system is sold and installed.

1958
Honeywell flight controls help put America's first satellite into orbit. The flight leads to Honeywell participation in every U.S. manned space mission.

1960
The Commercial Division installs the first Selectographic Data Center.

1967
Total Honeywell sales exceed $1 billion for the first time.

1970
General Electric and Honeywell agree on a merger to form a new Honeywell computer subsidiary.

1975
Process Control Division introduces the TDC 2000 plant-wide process control system, the first incorporating microprocessors.

Together, we can find the answers.

Honeywell

1983
New Honeywell themeline is adopted.

1984
For U.S. Department of Defense VHSIC (Very High Speed Integrated Circuit) program, Honeywell develops a chip containing 136,500 transistors and diodes, the most complex bipolar circuit ever built.

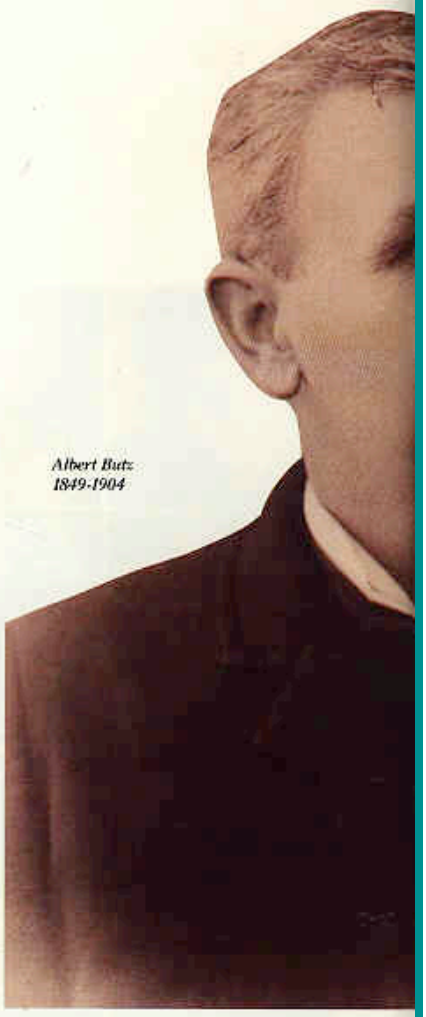
Things Remembered

A hundred years ago an unassuming inventor named Albert Butz applied the principle of feedback to an apparatus that opened and closed the damper on home furnaces. From that principle grew automated control, and the company we know today as Honeywell. While Butz's invention was the spark for the company it is the people of Honeywell who, like fine threads woven through a brightly colored tapestry, make up its history, its lore and its soul.

What we have provided here are some recollections from the first 100 years of life at Honeywell. These are snippets from the past which introduce people like the 1920s door-to-door salesmen who sometimes gave more than their all; the Canadian with hair like flame and a temperament to match who helped launch the company on its international journey; the president who was trained by trial and error; and a Tom Sawyer who grew up to spend all his days in the Honeywell family.

We've made no attempt to write a definitive history. Rather, we've tried to give you a scrapbook filled with snapshots of the people who built the Honeywell we know now. For in knowing who we were in the past we know who we are today, and who we will be tomorrow.

In The Beginning



Albert Butz
1849-1904

When Albert Butz invented his "damper flapper" in 1885 he had no idea it was the seed of a company that would grow to reach around the earth and into space. No, Butz was a tinkerer, a gadgeteer who was happiest at his workbench.

Butz was born in Switzerland in 1849. He came to this country with his parents as an 8-year-old boy. At 16 he enlisted in the 47th Wisconsin Infantry of the Union Army and served six months until the end of the Civil War. Of his experience, Butz wrote, "Having no battles to fight and nothing to do but drill, about the most important event that took place was riding the captain on a rail out of camp for neglect of his company and too free use of liquor."

The birthplace of the company that would become Honeywell.

Butz disappears from recorded history until 1881 when he shows up in St. Paul as a subscription book salesman for G.W. Borland and Company. Three years later he and a partner formed Butz and Mendenhall Hand Grenade Fire Extinguisher Co., a firm which manufactured glass spheres filled with water which hung from ceilings in baskets. When fire broke out the basket would burn, the sphere would drop to the floor and break and, theoretically, the water would extinguish the fire.

Meanwhile, Butz was at his workbench tinkering with a spring motor equipped with a crank arm that would operate chains or wires to adjust the dampers of a coal-fired furnace or boiler in response to the demands of a room thermostat. The purpose of his invention was to maintain an even temperature in the home and

The first thermostat used in the Butz system.

An 1888 advertisement which appeared in Century *and* Harpers.

relieve the home-owner of the tedious job of opening and closing the damper by hand. Because of the way it worked Butz's gadget became known as a "damper flapper."

It looked promising. He and a group of investors formed Butz Thermo-Electric Regulator Company to manufacture his damper flapper in a barn-size, drafty building in what is now downtown Minneapolis.

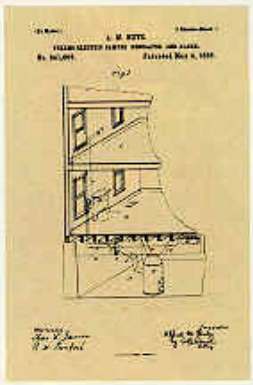
The year was 1885.

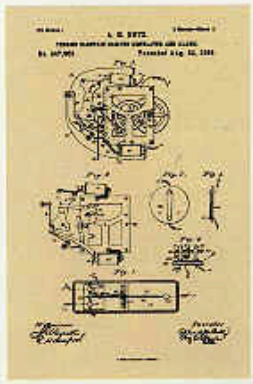
Demand for the damper flapper was not overwhelming. Home-owners had to go to the cellar to put coal on the fire anyway—and, to make matters worse, few furnaces and boilers manufactured at the time had the type of lift dampers that could be connected to the device. Furthermore, Al Butz was no fireball of a salesman. In fact, it's doubtful many were sold at all.

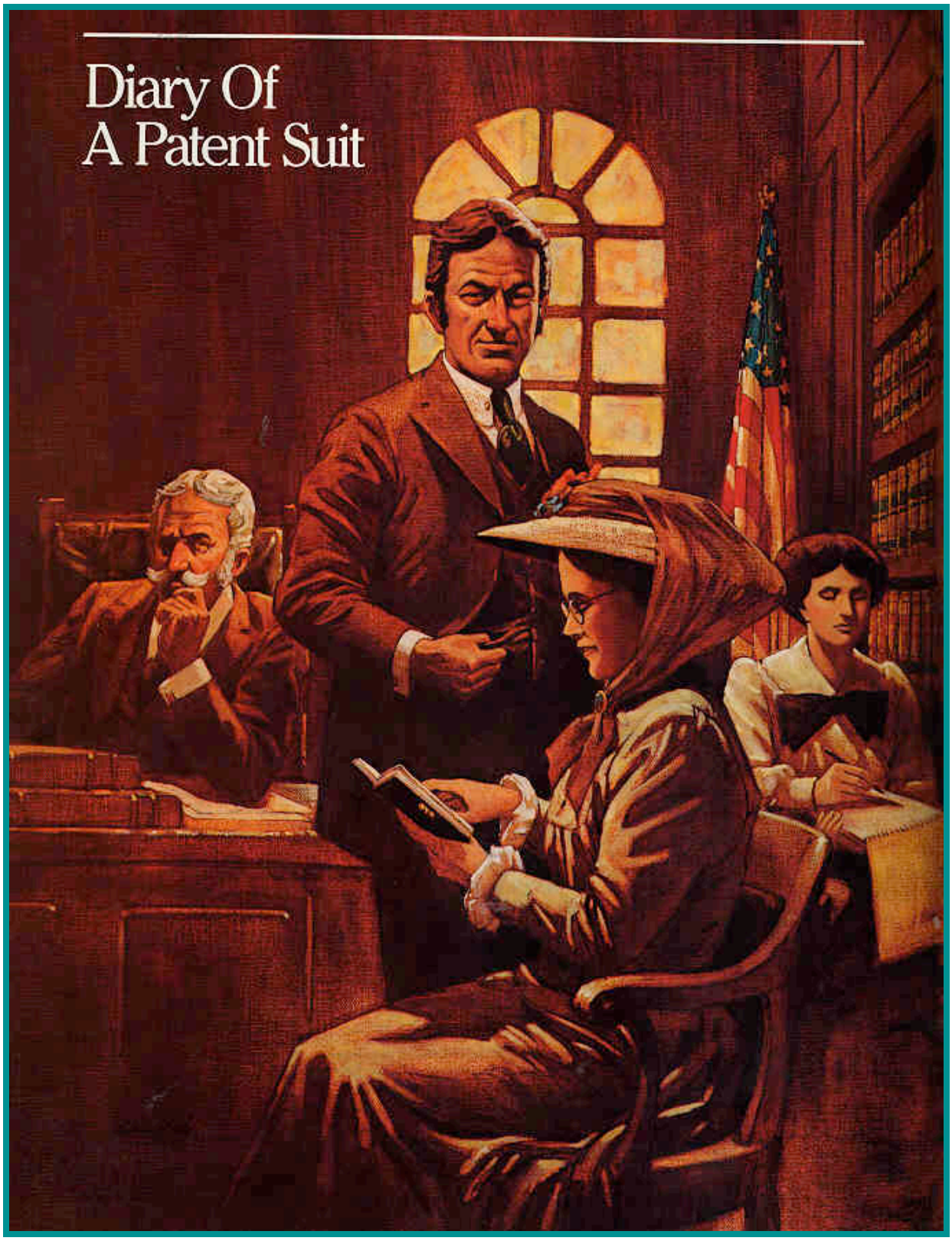
The next we hear about him is in 1888 when he moved to Oak Park, Illinois, where he went to work for Chicago Heat Regulator Company. Upon his death in 1904 his obituary said, "He had been an inventor for many years, and had only recently perfected a heat regulator, which was recognized by experts as of great value."

Before leaving for Oak Park, however, he sold his patent for the damper flapper to his attorneys, Paul, Merwin and Sanford, and the patent remained in the Twin Cities where it formed the basis for the company that would eventually be called Honeywell. Butz's patent was the first application of the principle of feedback on which is based the science of automated control, an industry that would transform the world.

Pages from Butz's first and second patents.






Diary Of
A Patent Suit

ust after the turn of the century the industrial revolution was in full bloom, commerce was growing, the country was expansion-minded and eager industrialists were filing a dozen patent suits a month in federal courts. Among those involved in a suit was the Electric Heat Regulator Company of Minneapolis, a predecessor of today's Honeywell Inc.

In October 1911 the officers of the Jewell Manufacturing Company of Elmira, N.Y., filed suit in United States District Court in Massachusetts charging that Electric Heat Regulator had infringed on a clock thermostat patent it had bought from a man named Schuyler B. Post in early 1908.

Jewell marshalled some strong evidence. There was the note to Jewell, dated February 7, 1908, from J.C. Kersteter, Electric Heat Regulator's factory superintendent. "Gentlemen," it said, in even, precise penmanship. "I recently purchased a house in which there is one of your controllers but it is all disconnected and does not work. Please send me directions for connecting it up and making it work." It was signed "Yours Truly," and gave Kersteter's Minneapolis home address.

There was also the September 20, 1907 letter to Jewell from Wirt Wilson, brother-in-law to the Minneapolis company's president, W.R. Sweatt, on his insurance company's letterhead, which said, "Please send me full particulars regarding your Heat Regulator. The cost of same and whether it can be installed readily by a novice. Please give full particulars."

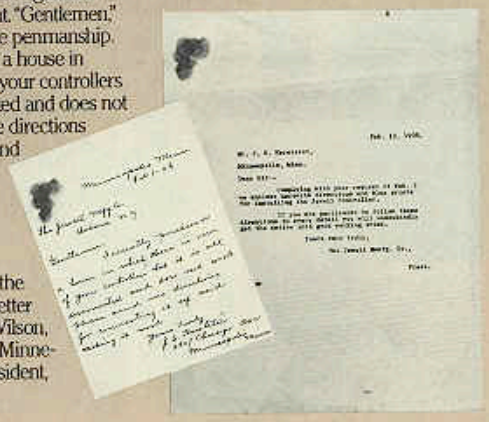
But the Minneapolis company had a pretty strong defense of its own. Company officials argued that their clock thermostat, called the Kersteter Sample Number Three, had been in use in the Sweatt home as early as September 1906. To back up that defense Mrs. Jessie Sweatt, a member of the board of directors and a proper lady of the times who kept a diary for a number of years, gave a deposition which saved the day.

"One Sunday, in the fall of 1906, my father, George P. Wilson, brought Judge Charles Pollock, of Fargo, North Dakota, home from church with him and Judge Pollock stayed for dinner," Mrs. Sweatt testified. "I remember he spoke with my husband, Mr. Sweatt, of the thermostat. I find, in referring to my diary, that I have an entry under the date of Sunday, September 16th, 1906, which reads as follows, 'Father brought Judge Pollock home from church.'"

Apparently in the face of such exact accounting Benjamin C. Wickes, president of Jewell, was persuaded his case wasn't as strong as he had hoped. Time has fogged in the facts a bit, but the record shows that in 1912 Mr. Wickes and Mr. Sweatt agreed to settle before the case ever went to court.

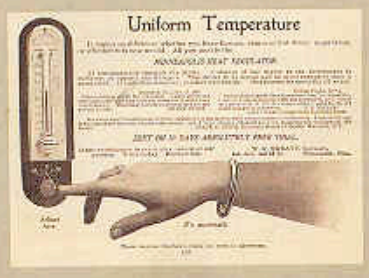
The clock thermostat used in the Sweatt home.

Correspondence between Jewell and Kersteter.



In fact, the Minneapolis company was so impressed with the Jewell thermostat that it paid Jewell $3,000 for a license to manufacture the thermostat. It was further agreed that Jewell would be paid $10 for each and every thermostat that might be manufactured without notice of the license, a penalty which took on even greater meaning 10 years later when, in an ironic twist of the tale, Honeywell Heating Specialties Company, arch rival of Electric Heat Regulator Company, bought Jewell's instrument line. The issue became moot, however, in 1927, when the two companies merged.

A 1908 Jewell advertisement.



A 1902 advertisement from **McClure's Magazine.**

To Fire And Forgive

W.R. Sweatt

Every company has its inside jokes. In the 1920s a legend is woven from stories exchanged by Honeywell people. An uncommon number of them, it developed, had, at one time or another, been fired and rehired, sometimes all in the same day. There are so many stories about this phenomenon that there developed an informal club of employees who could joke about their trip through the revolving door. But none demonstrates the legend as well as the tale about the young man in New York.

One early morning in 1926 a very distinguished gentleman appeared in the Minneapolis Heat Regulator office in Grand Central terminal in New York City. He arrived at 8 o'clock, and since Walter Wilson, who was service manager, didn't get in until 9, he let himself in to Wilson's glass-paneled office, put his feet up on the desk, lit a cigar, (patently against the rules at the time) and proceeded to read the morning paper.

Fred Kaiser, Wilson's assistant, was in charge of the office at that hour. He wondered about the brash fellow in Wilson's office, but he had several service men to dispatch and no time to inquire.

At 9 o'clock Wilson arrived at the office and shook hands with the chap who had ensconced himself in his

Grand Central Station, the building that housed Honeywell's New York Office in the 1920s.

Fred Kaiser during the 1920s.

chair. At 10 o'clock the buzzer rang three times, which was the signal that Wilson wanted to see Kaiser. Without pausing for introductions, Wilson asked Kaiser to describe the troubles their customers had been having with a valve and the solution he had devised during the previous weekend. Kaiser explained his idea to his boss and the anonymous visitor and finished with the remark that he didn't think the engineer from Minneapolis who had suggested a different solution knew what he was talking about.

"I don't give a damn what you think," the distinguished gentleman told him. "You're not paid to think. You're paid to do what you are damned well told to. Get out of here. You're fired."

Kaiser, shocked and quite bewildered, collected his pen, his pencils and his hat and said good bye to the office staff, then headed for the other end of the building to say good bye to the lad who ran the stockroom. When he told the boy he had been fired the boy asked who had fired him.

"I don't know," Kaiser replied truthfully.

Just as he was leaving, Wilson and the gentleman came to the stockroom and asked him to explain again what the trouble was with the valve. Picking up a sample valve that was being tested in the stockroom, Kaiser showed the two men how his theory worked. When he was through, the gentleman asked him if he would continue to work out his ideas and send personal reports directly to him in Minneapolis.

"Who are you?" Kaiser finally found the courage to ask.

"I'm W.R. Sweatt and I own this company," he replied. "You're hired. How does $10 a month raise sound?"

Kaiser went back to work and remained with the company 45 years, rising to corporate vice president in field marketing for the southern region.