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THE RECORD REPORTS

13 Editorial

On making things happen
instead of letting things happen

4 Letters/calendar

33 News in brief

Short items of major
national interest.

34 News reports

GSA dedicates its much-heralded
energy-conserving office building in
Manchester, New Hampshire. COFPAES
report concludes that A-Es get
inadequate return for Federal work.
Smithsonian opens Cooper-Hewitt
Museum of Design at restored Carnegie
mansion in New York City.

37 Human settlements: world news

40 Buildings in the news

Chicago AIA honors 14 Distinguished
Buildings in its Honor Awards Program



43 Required reading

161 Office notes

ARCHITECTURAL BUSINESS

65 Dodge/Sweet's Construction Outlook for 1977

From the Economics Department
of McGraw-Hill Information Systems
Company, the forecast for building
is optimistic: the potential lies
in apartment, commercial and
industrial construction.

75 Building costs

The Dodge Building Cost Services
introduces a new publication of
commercial building component costs
based on 500 new structures.

FEATURES

89 Evoking the spirit of 1876 for a display of Victoriana

The great but neglected Arts and Industries Building of the Smithsonian Institution has been renovated for the Bicentennial. It now holds a new exhibition of Victorian artifacts designed to give the experience of having lived 100 years ago. The architect in charge of the remodeling was Hugh Newell Jacobsen, who has successfully created a 19th century context for the show.

95 Planning the really-big suburban office building

At slightly over 3 million square feet, the United Services Automobile headquarters in San Antonio is larger than many noted urban skyscrapers. Designed by architects Benham-Blair & Affiliates, it shows one successful approach to planning that solves problems seemingly inherent in large horizontal buildings.

101 Pennzoil Place Houston, Texas

Central to the story of Pennzoil is not only the genius of Johnson/Burgee, but also the conviction of developer Gerald Hines that quality design and engineering can, despite somewhat higher front-end costs, be feasibly amortized by keener, quicker public response and, of course, signed leases.

111 Three solar houses

A number of factors are now making solar heating more interesting to residential architects and their clients.

112 Private residence in Vermont by Sunshine Design.



Robert Perron

114 Speculative house in New York by Raymond, Rado, Caddy & Bonington.

116 Kelbaugh residence, Princeton, New Jersey by Douglas Kelbaugh.

BUILDING TYPES STUDY 495

119 Industrial Buildings

While there has been a noticeable rise in renovation of industrial facilities in recent years, there is renewed interest on the part of owners for all-new facilities. The collection of projects presented in this study represent some imaginative solutions to the problems that continually plague large manufacturing companies both in the United States and abroad.

119 Trio Industries, Inc. Shelton, Connecticut Shreve Lamb & Harmon, architects.

122 Endevco Electronics Corporation San Juan Capistrano, California William Kenneth Frizzell, consulting architect.



Julius Schulman

126 John Deere & Company Engine Works Waterloo, Iowa Smith, Hinchmann & Grylls Associates, architects.

128 Radio Corporation of America Glass Plant Circleville, Ohio Haines Lundberg Waehler, architects.

130 Carlsberg Brewery Northampton, England Knud Munk, architect.

ARCHITECTURAL ENGINEERING

133 Heat pump gets by with less energy by making ice summer and winter

A hybrid heat-pump system designed by engineer Robert G. Werden for a 60-bed VA nursing home in Wilmington, Delaware makes ice in an "energy bank" to reduce energy consumption and costs. The refrigeration system makes ice in winter to get heat when the outdoor air is too cold for an air-source heat pump. And it makes ice in summer at night for daytime air conditioning.

136 Community center is the largest solar heating/cooling installation

Over 10,000 square feet of solar collectors in a saw-tooth configuration on the roof of the Shenandoah Community Center will produce 90 per cent of the heat for the heating season, and 60 per cent of the cooling.

141 Product reports

143 Office literature

200 Classified advertising

212 Advertising index

215 Reader service inquiry card

NEXT MONTH IN RECORD

Building Types Study: The home towns come back

The December special issue of RECORD deals with one of America's most significant architectural subjects: towns and small cities across the country, having suffered from varying degrees of blight and neglect, are beginning to be rehabilitated. Consortiums of architects, mayors, bankers and businessmen are joining forces to rescue their home towns. Beyond esthetic considerations, these revitalizations are designed to arrest the flight of business and industry from older environments, and from the people who live in them.