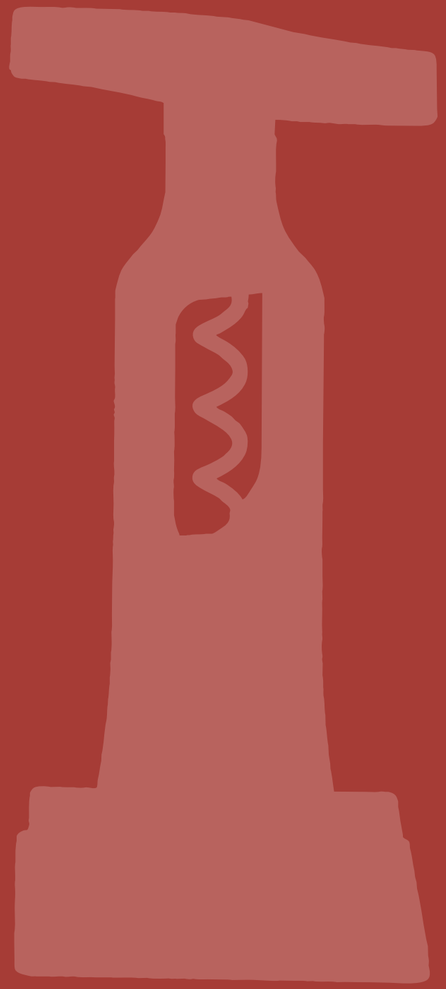
4 Useful Objects



In 1938, the Museum teamed up with retailers to exhibit recent designs that were affordable to the average consumer. The exhibition's title was *Useful Household Objects under $5.00*, and it consisted of well-designed objects, ranging from kitchen utensils, traveling bathroom accessories to glassware, wall coverings, and curtains, all for under $5.00. It was shown in seven other cities in addition to New York, at venues ranging from colleges and department stores to small specialty shops. The objects were selected by the curator John McAndrew according to their suitability of purpose, material, and process of manufacture. The exhibition was so successful and had such a positive response that an annual series of Useful Objects exhibitions followed. It lasted for nine years, until 1947; and while the term *useful* remained constant, the price increased over the years (to $100 dollars in 1947). In other shows the objects reflected the war years, for example, those chosen for the 1942 *Useful Objects in Wartime under $10* exhibition avoided objects made of materials integral to the war effort: metals, plastics such as Lucite, Plexiglas, nylon, Bakelite, and crystallites (used in airplanes and other military equipment), and leather.

While the aesthetic celebrated by the Museum's 1934 *Machine Art* exhibition came to define the design collection early on, the term *useful objects* actually had appeared a year prior, in the 1933 exhibition *Objects: 1900 and Today*. This, the Museum's first design show, was both a contemporary survey and an historical retrospective, which contrasted the vast differences between design at the turn of the century, such as the handicrafts of William Morris and the natural forms of Art Nouveau, and that witnessed by the "modern" 1930s. The curator Philip Johnson juxtaposed the terms *decorative* and *useful* in comparing the two different attitudes toward design: one based "on the imitation of natural forms and lines which curve, diverge and converge," and another based on utility, the modern mindset "that industrial design is functionally motivated and follows the same principles as modern architecture: machine-like simplicity, smoothness of surface, avoidance of ornament."

Unlike the objects included in *Machine Art*, the useful objects presented here are not collected primarily for their purity of form but, rather, for the integration of an innovative functionality and often the use of new materials. In other words, in the case of useful objects, form, and ultimately beauty, follows function. Products such as the folding flashlight, the ergonomic designs for a fork-spoon, interlocking bottles, or the collapsible hexagonal salad basket modify established forms to improve performance. The Glass Frying Pan and Baking Dish, for example, were not only direct responses to innovations in glass (Pyrex, or heat-resistant borosilicate glass), but arose out of the war effort to reduce the use of metal in kitchen appliances. Likewise, the lightweight materials of the Racing Wheelchair not only adapt innovations from the aerospace industry but reflect an attitude influenced by politics, an awareness of the equal rights of minority groups. Even the Cable Turtles, made of thermoplastic elastomers, a form of plastic that is recyclable, responded to the need for "green" products in an expanding technological world, in which cords tangle up our desks and homes. It was such utility and convenience that was touted in the original exhibitions in the hope of improving lifestyles and daily routines.

Perhaps the most influential innovation to result directly in a rethinking of standard objects, however, has been that in plastics. The use of Bakelite, the first synthetic material, in the late 1920s and early 1930s for electrical goods and automobile parts because of its superior insulating properties and rigidity, resulted in a radical modification of the Electric Hairdryer. Its earlier brass and metal counterpart is surprisingly pared down to a handle, motor, and airshaft, a form that endures today. PVC (vinyl), melamine, polyethylene, polystyrene, and nylon, all were invented in the 1930s, but did not enter the consumer market until the 1950s owing to the war effort. They had a revolutionary effect. Everything from Tupperware, one of the earliest products to employ polyethylene, to its myriad variations, such as the blow-molded Container for Liquids, exploited its toughness at low temperatures and its low production costs. Likewise, other plastics and techniques refined in the 1950s, such as ABS and injection molding, were adapted in the functional household object and in the purely pleasurable arena of toy design. By 1958, LEGO became the first Danish toy company to employ refined processes of injection molding, and their trademark "stud-and-tube" coupling system of plastic bricks, heretofore made of wood, took hold.

From the 1960s to today, expanded-polyurethane foams, wet-look polyurethane, glossy ABS, transparent acrylic, and thermoplastic elastomers have not only transformed the domestic landscape, but have come to reflect an increasingly transient, disposable, and impermanent lifestyle. The collapsible and lightweight baby stroller made of Polythene (Dupont's brand of polyethylene), the Spoon Straw and the Disposable Folder Razor are no longer solely useful objects for the home but for consumers who are increasingly mobile.

The Useful Objects series celebrated the ideal of standardization to make good design universally available. The first exhibition was a testament to the democratic notion that good or useful design did not have to be expensive, and a belief that aesthetically functional objects should be available to all. With the invention of plastics and disposable products, this pursuit seemed more feasible than ever. In subsequent exhibitions, while the term *useful objects* has not been used explicitly, the premise of utility has been a forceful presence.

—Tina di Carlo

Designer unknown
Electric Hairdryer. c. 1928
Nickel-plated metal, wood, and Bakelite resin, 8¾ × 5 × 9⅜"
(22.3 × 12.7 × 23.8 cm). Manufacturer: Friho-sol, Germany. Marshall Cogan Purchase Fund

Christopher Dresser
Watering Can. c. 1876
Painted tin, 12⅝ × 9⅞ × 7¼"
(32 × 25.1 × 18.4 cm). Manufacturer: Richard Perry, Son & Co., England (c. 1884). Gift of Paul F. Walter

Designer unknown
Welder's Mask. Before 1930
Coated cardboard, glass, Bakelite resin, and metal, 9 × 9 × 7"
(22.9 × 22.9 × 17.8 cm). Manufacturer: American Optical Corp., USA (c. 1930). Department Purchase Fund

Corning Glass Works
Frying Pan. n.d.
Borosilicate glass and steel,
2¾ × 12½" (7 × 31.8 cm). Purchase

Designer unknown
Tumbler. Before 1947
Glass, 4¾ × 2⅝" (12.1 × 6.7 cm) diam.
Manufacturer: American. Purchase

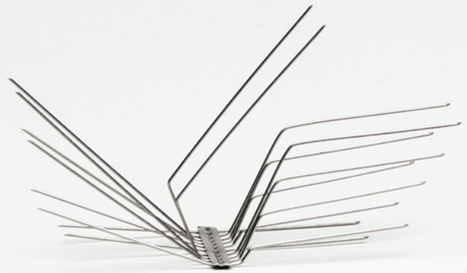
The Stanley Works
Tinsmith's Hammer. Before 1940
Steel and wood, 12 × 4⅜ × 1"
(30.5 × 11.1 × 2.5 cm). Purchase

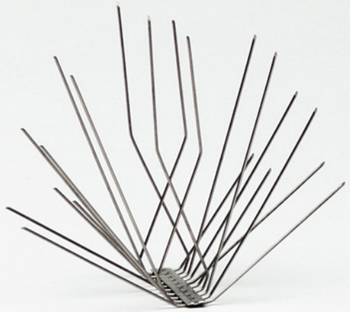
Corning Glass Works
Baking Dish. 1949
Borosilicate glass, 2¼ × 10⅛ × 8⅝"
(5.7 × 25.7 × 21.9 cm). Gift of Greta
Daniel

Vernon P. Steele
Adjustable Garden Rake. 1945
Aluminum and wood, 64⅜ × 22¾"
(163.5 × 57.8 cm). Manufacturer: Kenco
Products Corp., USA (c. 1945–48).
Purchase

Ikkan Hiki
Chasen. Before 1953
Bamboo, 4½ × 2¼" (11.5 × 5.7 cm)
diam. Gift of Japan

Charles B. Kaufmann
Bird Control Strips. 1949
Stainless steel, each: 3¾ × 4 × 2"
(9.5 × 10.2 × 5.1 cm). Manufacturer:
Nixalite of America, USA (1950).
Gift of the manufacturer





Designer unknown
Collapsible Salad Basket. Before 1953
Tinned steel, 19 × 16" (48.3 × 40.6 cm)
diam. at center. Manufacturer:
H. A. Mack & Co., USA. Gift of the
manufacturer

Harry V. Cremonese
Delphic Kitchen Utility Blades. 1973
Carbon stainless steel and beech
wood, various dimensions, largest:
15 × 3⅜ × ¾" (38.1 × 8.6 × 1.9 cm).
Manufacturer: Mitsuboshi Co., Japan
(1975). Gift of the designer

Peter Sciascin
Lobster Pick. n.d.
Plastic and stainless steel, 8¼ × ¾"
(21 × 1.9 cm). Manufacturer: Holt
Howard Associates, USA (1954).
Purchase

John Hays Hammond
Bottle Opener. 1948
Bronze and magnetic top, 6¼ × ⅝"
(15.9 × 1.6 cm). Manufacturer:
Hammond Research Corp., USA.
Gift of the manufacturer

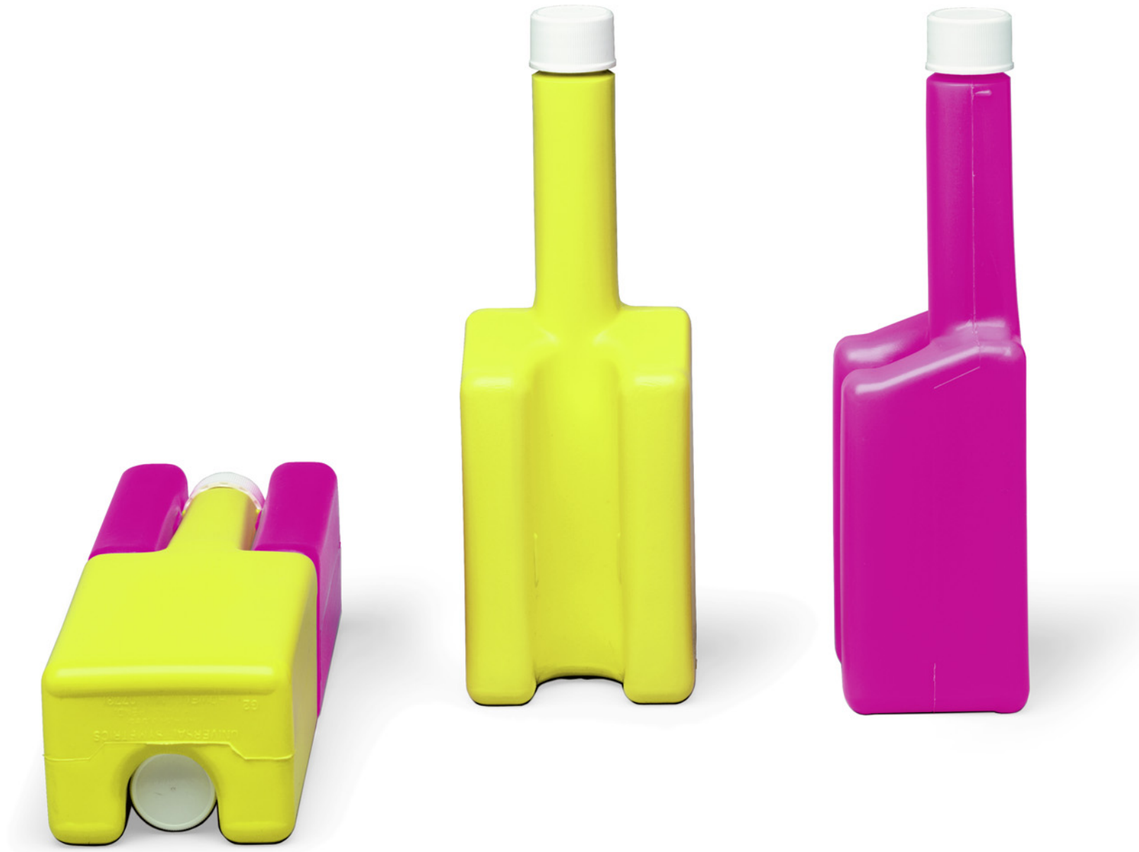
Earl Silas Tupper
Pitcher and Creamer. 1946
Polyethylene, pitcher 6½ × 6⅝ × 4¾" (16.5 × 16.8 × 12.1 cm); creamer 4¼ × 4¼ × 3⅜" (10.8 × 10.8 × 8.1 cm).
Manufacturer: Tupper Corporation, USA (c. 1954). Gift of the manufacturer

In the early 1940s, Earl Silas Tupper, a chemist and a designer of metal corsets and garter belts, started experimenting with injection-molded polyethylene, a new industrial material used primarily for insulation, radar, and radio equipment. In 1942 he founded the Tupper Corporation to manufacture household items out of the new material. The first designs, released in 1946, included a coffee cup with a handle integrated into the body of the cup and tumblers with flowered edges for easier sipping.

The following year, Tupper applied for a patent for what turned out to be his landmark invention, the Tupper Seal, an airtight polyethylene closure based on that of a paint can. Using this ingenious system, he began to manufacture the semi-opaque, pastel-colored stackable food containers that came to epitomize 1950s suburban American life. The containers (designed, according to Tupper, to make a "woman's life" easier) were heralded for their economic and innovative design. *House Beautiful* referred to them as "fine art for 39 cents," and compared the "gorgeous" material to alabaster and jade, but they did not sell well. Then in 1951 Tupper hired Brownie Wise, a middle-aged, divorced mother who correctly decided that throwing a party for neighboring housewives was the best way to sell plastic. In 1958 the Tupper Corporation was sold to the Rexall Drug Company after Tupper had a falling out with Wise. Rexall promptly renamed the company and its products, Tupperware, a name that still conjures up a postwar consumer culture of standardization, self-service, and efficiency.

Although a clearer and less wax-like form of polyethylene was used beginning in the 1960s, the material of the original containers has deteriorated rapidly, prompting museum curators and conservators worldwide to devise new solutions for the upkeep of twentieth-century innovative materials. —T.d.C.

Juris Mednis
Bottles. 1983
Polyethylene plastic, each:
8¾ × 2⅞ × 2¼" (22.2 × 7.3 × 5.7 cm).
Gift of the designer



Roberto Menghi
Container for Liquids. 1958
Polyethylene plastic, 19 × 14 × 6"
(48.3 × 35.6 × 15.2 cm). Manufacturer:
Pirelli, Italy. Gift of the manufacturer

Willys-Overland Motors, Inc.
Truck: Utility ¼ Ton 4 × 4 (M38A1)
Jeep. 1952
Steel body, 6' 1¾" × 60⅞" × 11' 6⅝"
(187.3 × 154.6 × 352.1 cm). Gift of
DaimlerChrysler Corporation Fund

The Jeep is the quintessential utilitarian vehicle—a reliable tool whose primary function is transport, on or off road. Its official name, Truck: Utility 1/4 Ton 4 x 4, means it is a four-wheel-drive vehicle capable of carrying 500 pounds. The origin of its popular name, Jeep, has been much debated.

The Jeep was first invented in 1940, when the United States Army issued specifications for a small, powerful, general-purpose vehicle. Engineers from the American Bantam Car Company, Ford Motor Company, and Willys-Overland Motors, Inc. were largely responsible for designing the Jeep in a matter of weeks for the Army, a supreme example of American engineering ingenuity. The Jeep was one of the most technologically advanced machines at the time. After World War II, Willys-Overland Motors continued to produce the Jeep for military and civilian markets.

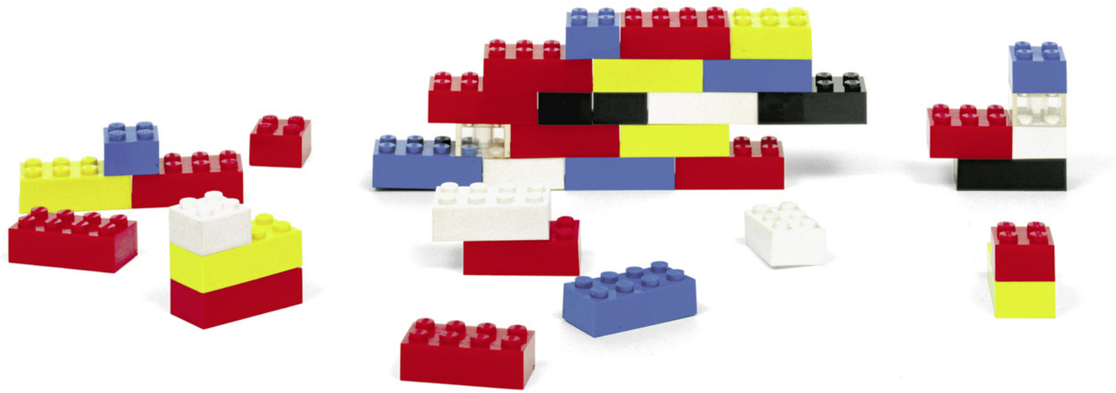
In 1952 engineers at Willys-Overland modified the original 1940 design and produced the M38A1, a new model that was faster, slightly larger, and widely considered to be the best military Jeep ever built. Like the original model on which it is based, it is characterized by a flat body with high ground clearance, yet with a low overall height. When the Museum first exhibited a Jeep in 1951, the curator Arthur Drexler described it as "a sturdy sardine can on wheels." The profile resembles a metal box, but with good reason. The flat body rides high above the ground for clearance over rough terrain. The Jeep's overall height remains low for strategic reasons. Even the windshield can be folded down on the hood. The absence of side doors makes it easy to get in or out quickly. Only a canvas canopy provides shelter from rain. With the wheels removed, the boxlike bodies could be efficiently crated and stacked for shipment. The M38A1, with its curved hood and fenders and its distinctive front grille panel, remained in production for sixteen years and strongly influenced the design of popular civilian Jeeps for more than three decades—a testament to its functional appeal and its transformation into a cultural icon. —P.R.

O. F. Maclaren
Baby Stroller. 1966
Aluminum alloy tubing and
polyethylene fabric, 35 × 15 × 36"
(88.9 × 38.1 × 91.5 cm). Manufacturer:
Andrew Maclaren Ltd., England (1967).
Gift of the designer

Godtfred Kirk Christiansen
LEGO Building Bricks. 1954–58
ABS plastic, various dimensions,
largest: 7/16 × 1¼ × 5/8" (1.1 × 3.2 × 1.6 cm).
Manufacturer: LEGO Group, Denmark
(1958). Gift of the manufacturer

Godtfred Kirk Christiansen, whose father founded LEGO, believed that play is a process of discovery and learning that is essential to a child's growth and development. LEGO Building Bricks offer unlimited possibilities for creative and imaginative play. These miniature modular elements, in various sizes, shapes, and colors, have inspired children of all ages to construct three-dimensional play environments, from pirate ships and underwater worlds to castles and spacecraft. Recent developments include interactive software, a story-driven building universe, and robotics programming and construction. LEGO has even developed a business-strategy building system for adults called LEGO Serious Play.

Founded in 1932, the LEGO Group originally produced wood toys for children. The company name derives from the Danish *leg godt*, which means "play well." The current plastic bricks, with their stud-and-tube coupling system, were introduced in 1958. The first bricks were made of cellulose acetate, later replaced with acrylonitrile butadiene styrene (ABS), a more stable plastic with better color quality. LEGO estimates that over the past sixty years, its global sales translate into the equivalent of fifty-two blocks for each of the world's six billion inhabitants. —C.L.



Russell Manoy
Mug and Plate. 1966–67
Melamine resin, plate 11 × 7 × 1¾"
(27.9 × 17.8 × 4.4 cm); mug 5 × 2¾"
(12.7 × 7cm) diam. Manufacturer:
Antiference Ltd., England. Gift of
Lumex, Inc.

Ergonomi Design Gruppen, Maria
Benktzon, and Sven-Eric Juhlin
Knork Fork. 1978
Polycarbonate and ABS plastics and
stainless steel, 7¼ × 1¼ × ¾"
(18.4 × 3.2 × 1.9 cm). Manufacturer:
RFSU Rehab, Sweden (1980). Gift of
the manufacturer

Ergonomi Design Gruppen, Maria
Benktzon, Håkan Bergkvist, and
Sven-Eric Juhlin
Adjustable Spoons. 1986
Polycarbonate and ABS plastics,
each: 6½ × 1⅜" (16.5 × 3.5 cm).
Manufacturer: RFSU Rehab, Sweden
(1990). Gift of the manufacturer

Britt-Louise Sundell
Mixing Bowl. 1960
Propen plastic, 5⅜ × 10¾ × 11½"
(13.7 × 27.3 × 29.2 cm). Manufacturer:
Gustavsberg, Sweden. Gift of Design
Research

Richard Sapper
Espresso Coffee Maker (model 9090). 1978
Steel, 8 × 6 × 4⅞" (20.3 × 15.2 × 12.4 cm) diam. Manufacturer: Alessi, Italy.
Gift of the manufacturer

Richard Sapper
Minitimer Kitchen Timer. 1971
Plastic, 1⅛ × 2⅝" (2.8 × 6.7 cm) diam.
Manufacturer: Ritz-Italora, Italy. Gift of the Terraillon Corporation

Smart Design
Good Grips Paring Knife. 1989
Stainless steel and synthetic rubber, 7¾ × 1⅜ × 1" (19.7 × 3.5 × 2.5 cm).
Manufacturer: Oxo International, USA (c. 1990). Gift of the designers

Herbert Allen
Screwpull Corkscrew. 1979
Polycarbonate plastic and metal, 5¾ × 3 × 1⅛" (14.6 × 7.6 × 2.9 cm).
Manufacturer: Hallen Co., USA (1981).
Gift of the manufacturer

The wine-lover's dream is a hassle-free corkscrew. The Screwpull was invented to satisfy such a dream—to pull even the most recalcitrant cork from its bottle with ease. This efficient low-priced gadget is astonishing in its simplicity. First, its plastic frame is fitted snugly over the bottle's neck. Then the helical screw, with its anti-friction coating, is lowered—by turning the knob at the top—through the guide and driven into the cork. With continued rotation, and without the need to pull, the cork rises out of the bottle and climbs up the screw until it is removed.

Herbert Allen, a prolific inventor and engineer in the oil-drilling and aerospace industries, designed this infallible tool. During his first trip to Europe in the 1950s, he became a wine enthusiast. He began work on the Screwpull in 1975 at his wife's request for a corkscrew that would perform perfectly and effortlessly every time. Four years later the corkscrew was available on the market in a range of colors, including clear, white, amber, and black.

Allen defined his philosophy about design as always trying to achieve the best performance. He explained: "The Screwpull is an example of this same philosophy, namely to design a product that would do a given task far more efficiently than anything else available . . . I happen to believe that attention to aesthetic design, as well as the required attention to the functional design, leads to a superior ultimate design." Indeed, the Screwpull transcends mere function with its outstanding aesthetic characteristics. —P.R.

Eugene Walters
Welding Helmet (model 700). 1980
Fiberglass and plastic, 12½ × 8 × 7½" (31.8 × 20.3 × 19.1 cm). Manufacturer: Fibre-Metal Products Co., USA (1982). Skidmore, Owings & Merrill Design Fund

The Welding Helmet designed by Eugene Walters, with its indestructible and solid appearance, clearly indicates its use as a barrier against sparks, fumes, and heat. It features a broad, spherical oval of fiberglass specifically designed for welding in cramped areas. The rectangular visor, molded into the helmet, adds to its overall impenetrable character, filters out infrared and ultraviolet light, and prevents a debilitating halo effect from refracted light. The particular fiberglass used here makes for a lighter, stronger, and more flexible helmet than previous models. Fibre-Metal introduced the first welding helmet made of fiberglass in 1952. This model was shown in the Museum's 1991 exhibition *Modern Masks and Helmets*.

Helmets and masks are often indispensable protective devices for the survival of hazardous and extreme situations, such as warfare, sports, and industrial labor. Frequently they are able to transcend their primary role of protection and serve to disguise or proclaim a person's identity. Designed to be expressive as well as protective are such objects as the goalie mask that intimidates competitors, the racing helmet that enhances speed, and the gas mask that provides ventilation but also conjures fear and images of disaster. The Welding Helmet's machine-made uniformity and industrial look seem to characterize the wearer as an anonymous, almost mechanized creature. —C.L.

Emilio Ambasz
Flashlights. 1983
ABS plastic, each: 4 × 1¼ × 1" (10.2 × 3.2 × 2.5 cm). Manufacturer: G. B. Plast, Italy (1985). Gift of the designer

Anthony Maglica
Mag Charger Rechargeable Flashlight. 1982
Aluminum alloy and borosilicate glass, 12⅝ × 2⅜" (32.1 × 6 cm) diam. Manufacturer: Mag Instrument, Inc., USA. Gift of the manufacturer

Arthur A. Aykanian
Spoon Straw. 1968
Polypropylene plastic, 8 × ¼"
(20.3 × .6 cm). diam. Manufacturer:
Winkler Flexible Products, Inc., USA
(1979). Gift of the manufacturer

Robert P. Gottlieb
Hairspray Face Protector. 1974
Acrylic plastic, 11¾ × 6⅝ × 1½"
(29.8 × 16.8 × 3.8 cm). Manufacturer:
Two's Company, USA. Gift of the
manufacturer

Athos Bergamaschi
Disposable Foldable Razors. 1975
Polypropylene plastic and stainless
steel, each: open, 3¾ × 1¾ × 1⅛"
(9.5 × 4.4 × 2.9 cm); closed,
⅜ × 1¾ × 1¾" (1 × 4.4 × 4.4 cm).
Manufacturer: Elberel Italiana, Italy
(1977). Gift of Domus Academy, Italy

Mark Sanders
No-Spill Chopping Board. 1988
Polypropylene plastic, 2⅝ × 8¾ × 15¼"
(6.7 × 22.2 × 38.7 cm). Manufacturer:
Rubycliff Ltd., England (1990). Gift of
the designer

Bob Hall
Racing Wheelchair. 1986
Steel and nylon, 23⅜ × 25 × 45"
(60 × 63.5 × 114.3 cm). Manufacturer:
Hall's Wheels, USA (1987). Gift of the
designer

The designer Bob Hall was physically disabled at an early age by polio, and required a wheelchair. Undaunted by his condition, in 1975 he pioneered wheelchair racing by participating in the Boston Marathon. At the time he began competing, a racing wheelchair had not yet been designed. Instead, disabled athletes attempted to improve speed by altering their cumbersome everyday wheelchairs. Hall designed his first racing wheelchair in 1978 and founded a new company, Hall's Wheels. There he made handcrafted wheelchairs, measured to fit each individual, that weighed between fourteen and sixteen pounds, about half the weight of the wheelchair Hall had used in his first marathon.

The racing wheelchair introduced innovations that have had an impact on users of every type of wheelchair. This example, manufactured in 1987, features a lightweight frame of aircraft-steel tubing, a speedometer, and a tachometer. The wheels, adapted from racing bicycles, are angled for optimal arm movement and enhanced speed. The red and black coloring lends a sporty, sleek look. The Museum first showed Hall's Racing Wheelchair in the 1989 exhibition *Designs for Independent Living*, which presented outstanding examples of well-designed, mass-produced objects for the elderly and physically disabled. —C.L.

Designer unknown
X-Shaped Rubber Bands. 1995
Synthetic rubber, two sizes: small,
1¾" (4.4 cm) diam.; large, 2¼" (5.7 cm)
diam. Manufacturer: Mahakit Rubber
Co. Ltd., Thailand (1999). Gift of the
supplier, Laufer AC, Germany

Flex Development B.V.
Cable Turtle Cable Spool. 1996
Synthetic rubber, 1¼ × 2½"
(3.2 × 6.4 cm) diam. Manufacturer:
Cleverline, the Netherlands (1997).
Gift of the manufacturer

Décolletage Plastique Design Team
Bic Cristal. 1950
Polystyrene and polypropylene plastic and tungsten carbide, 5⅞ × ½" (14.9 × 1.3 cm) diam. Manufacturer: Société Bic, France. Gift of the manufacturer

Art Fry and Spencer Silver
Post-it Note. c. 1977
Paper and adhesive, 2⅞ × 2⅞" (7.3 × 7.3 cm). Manufacturer: 3M, USA (1980). Purchase

Among innumerable designs that enrich the Museum's collection, several have had a significant impact on the world. They are usually the ones, like the Bic pen or the Swiss Army knife, that have reached every part of the globe in their original form or in an inspired copy. They are useful, simple, and affordable revolutionary objects that have become necessary.

The Post-it Note is one of them. Many of us cannot imagine life without these "stickies." The original one, featured in the collection, is square to express rationality and yellow to attract attention. The manufacturer has described how its research scientist Dr. Spence Silver had first developed the technology in 1968 "while looking for ways to improve the acrylate adhesives that 3M uses in many of its tapes. In a classic case of innovative serendipity, Silver found something quite remarkably different from what he was originally looking for. It was an adhesive that formed itself into tiny spheres [each] with a diameter of a paper fiber. The spheres would not dissolve, could not be melted, and were very sticky individually. But because they made only intermittent contact, they did not stick very strongly when coated onto tape backings."

For many years, the application of this new discovery remained unrealized until Art Fry, a new-product-development researcher at 3M, frustrated with old-fashioned paper bookmarks falling out of books, saw a way to utilize this experimental adhesive, which allowed the removal and reattachment of paper. First a bookmark and soon thereafter an instant memo, the Post-it Note has generated innumerable offshoots and imitations. There even exists a software program, aptly called Stickies, that allows for notes to appear as if stuck onto the computer screen. Yet, it is the original square yellow note that has become ubiquitous in contemporary life. —P.A.