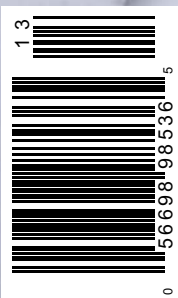


Cabinet

A QUARTERLY OF ART AND CULTURE

ISSUE 43 FORENSICS

US \$12 CANADA \$12 UK £7





An array of scopes from Jackson's instrumentarium, with accompanying distal lights. Courtesy Collection of the Mutter Museum, College of Physicians of Philadelphia.

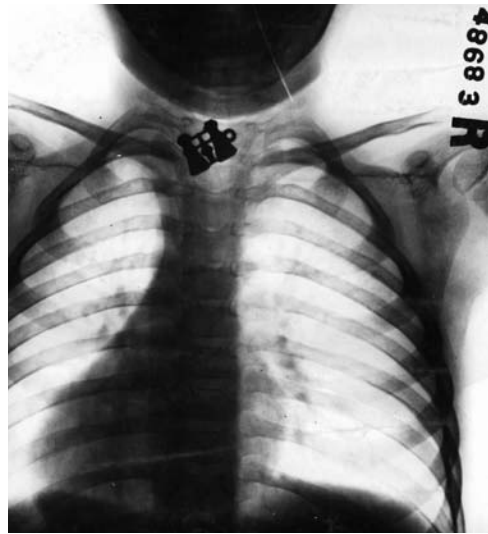
INGESTION / ALONE ON FLOOR WITH PILE OF BUTTONS

MARY CAPPELLO

Among the more beguiling collections in Philadelphia's Mutter Museum is a cabinet filled with indigestible and undigested *things*, things that people have swallowed or inhaled. A pioneering laryngologist named Chevalier Jackson and the colleagues whom he trained extracted nonsurgically more than two thousand "foreign bodies" from people's airways and stomachs and then preserved them in this cabinet, and in this way gave to them a local habitation and a name. Jackson, who died in 1958 at the age of ninety-three, wished for his collection of "Foreign Bodies Removed from the Air and Food Passageways" to be "accessible to whomever the [Philadelphia] College of Physicians Deemed Proper." "These specimens," Jackson insisted, "are not mere curiosities."

Feeling mighty intrigued, eager as the next person to open these curious drawers, I am clearly not the intended audience for these objects. My eyes swim with delighted interest, not just in the objects themselves and their imagined sojourns but also in Jackson's dedicated arrangement. Not curiosities, Jackson reiterates: "With the accompanying data," these foreign bodies "are, in my opinion, of enormous clinical value to the physician and surgeon." The data reside in a barely liftable, several-inch-thick Xerox copy of Jackson's "Classified Tabulation of Various Foreign Bodies Endoscopically Removed from the Air and Food Passages with Illustrations of the Foreign Bodies and All Data Pertaining to their Removal," which sits atop the drawers. Using the text as a cross-reference, a reader can match any of the objects in the drawers with a grid of information that Jackson provides: following each item and drawer number, we can learn the age and sex of the person associated with the object; the type of foreign body removed; where in the upper torso it was lodged and for how long; the type of anesthetic used (usually none); the type of tube used to extract it; any problems that presented themselves; the type of forceps used; the point of seizure of the object; the result (mostly in bald terms, "cured" or "died"); the length of time it took to remove the object; and further remarks about the case.

Open a drawer and feel yourself entranced by the particularity of each foreign body and the question it heralds: how? Here are double-pointed staples, a tooth and its roots shaped like a tiny pair of pants, the brass foot of an alarm clock, Indian-head nickels and Mercury dimes, a half dollar dated 1892. One toy wristwatch and one real wristwatch; a crucifix with several rosary



Foreign Body 914. A pair of toy opera glasses in the esophagus of a four-year-old. Courtesy Collection of the Mutter Museum, College of Physicians of Philadelphia.

beads attached; the metallic letter z from a toy airplane; one tiddlywink; and a handful of gruesome endogenous objects—substances, like hardened pus, produced by the body itself. Pins, silvery blue, and in each case opened and splayed—an alphabet of angles, upside down or right side up. Jacks upon jacks upon jacks. A radiator key, tiny binoculars (opera glasses), a plastic Binky doll. Oyster shell, a stove bolt, a bullet. A crayon nib. A glass bead, intact. A "Perfect Attendance" pin.

Each object found its unhappy place either in a person's trachea, larynx, bronchus, esophagus, stomach, pleural cavity, lung tissue, pharynx, or tonsil. No region of the aerodigestive tract was beyond this doctor's ingeniously delicate reach. But time played its role in cruelly indelicate ways, because while some removals took four seconds, others took forty minutes, and while some objects had been lodged for a mere four minutes, others lived inside a body for as long as forty years.

For every attitude, disposition, presentation, type, and foreign body scenario, Jackson seems to have designed a special instrument, letting the foreign body dictate its form. Thus, a special bronchoscope was created with an oval end to accommodate both points of a swallowed staple (of which there were many in his clinics). For the rare instance of a foreign body lodged in an upper bronchus, he designed a forceps that could reach around a corner; if the foreign body was hollow, a forceps that could fit inside it and then expand to achieve traction was required. The instruments had to be well-made—carefully designed forceps, for example, hug a



Toys and toy parts from the Chevalier Jackson Foreign Body Collection. Photo Rosamond Purcell, 2009.



An example of the kind of illustration of bronchoscopic, esophagogoscopic, and gastroscopic views that Jackson painted to accompany many of his articles and textbooks. From Jackson's *Diseases of the Air and Food Passages of Foreign Body Origin*, 1936.

foreign body, whereas a faulty one balances precariously upon it.

The body's interior fills up the doctor's eye as he peers down the tube—it is all that there is in the world for that moment—and yet his is a severely compromised view, since he only sees what appears directly in front of him inside a contracting and expanding circumference. But touch is not diminished—rather, it is heightened, as the operator feels his way in, sensing rigidities and resistances in the body, sensing the intensity and direction of the instrument's insertion, gauging depth so as not to go too deep, all the while watching for collapsing walls and clamping folds. The eye must not mistake one opening for another, of course, but Jackson trained his students to *feel* anatomical parts, chinks, and byways with the distal end of the tube, and with practice to acquire what he called a "nerve-cell habit" in their fingers until manipulating human anatomy with these instruments was done "subconsciously as with the knife and fork in eating," and could be conducted with "the delicacy of touch of a violin bow."

Jackson practiced and studied in order to know by touch exactly how much pressure a peanut could withstand without being crushed. He recommended that "the man who expects to be successful in removing peanut kernels" use "a delicate forceps well-oiled and working smoothly in his possession" to "crush a few quarts of peanut kernels to acquire the sense of tactile differentiation between the degree of forceps-pressure necessary securely to hold a peanut kernel during its withdrawal through the glottis and the degree of pressure that will crush it. This is a purely manual thing to be acquired only by feeling the peanuts crush and then feeling others against the tube-mouth while being withdrawn." He studied grains of corn to determine exactly how to avoid fragmentation, noticing that they "usually present the germ end, the center of which is soft. If this germ is grasped it will come away leaving the 'mouse-gnawed' grain behind." He suggested that the grain be grasped at its midpoint rather than at its tip, using special forceps that guaranteed a combination of "gentleness of grasp with sufficient holding power."

A splayed hairpin points upward in the esophagus. The bent part of the hairpin—its "dart"—lies lodged in the direction of the stomach while its two ends, like crinkled wings, threaten to pierce the esophageal wall on either side. Simply to grasp the dart with the forceps and attempt to pull the hairpin out would cause fatal trauma.



Chalk illustration by Jackson for a 1941 lecture showing a foreign body, in this case a blue marble, caught in a bronchus. The aspirated marble would act as a ball valve that would prevent the lung from re-inflating after expressing air. If not removed, the blockage would ultimately result in fatal pneumonia. From the estate of B. Thomas McMahon; courtesy Nancy M. McMahon. Thanks to Dr. Paul Castellanos for identifying the medical condition depicted here.

Jackson's carefully worked-out solution shows him disengaging each point one at a time, or more literally, lifting each pin out of its crevice by placing the forceps behind the pin and then rotating each point inward using a side-curved forceps, in order finally to draw both ends into the tube.

What's more marvelous? The fact of swallowing a foreign body, its nonsurgical extraction by Jackson, or his inserting it into an "arrangement" of things? What exactly occasions the collection of objects, as such? Their retrieval by Jackson and subsequent rescue? The acts of unusual swallowing to which they refer, and their transformation thereby from quotidian items to aura-laden Things? Or the precarious tightrope act they perform, caught as they are between will and accident, voluntary and involuntary acts?

The Chevalier Jackson collection of foreign bodies confronts us with different orders of the marvelous, competing orders of the strange, each of which draws us into a fascinating field whose foreground seduces us but whose vanishing point is out of reach. While the Jackson collection doesn't exactly share the same kind

of jaundiced limelight that most other specimens in the museum do—what Oliver Wendell Holmes called "the pathological sublime"—it does conjure what I'd like to call a "visceral sublime," a combination of fascination and disgust (think of the gustatory in the word *disgust*) that is felt, well, in the gut! A temptation and a terror around incongruity is what moves us, a boundary exceeded, a physiological rule broken: a battleship caught in a thorax, a jackstone stuck in an esophagus, a padlock not quite at home inside a stomach. We're afraid to think of how those things might have gotten inside a body, we're alarmed by the admixture, and more, disgusted and intrigued by the thought of how they were extracted.

How *does* someone swallow a glass collar button, shawl pin, dental root canal reamer, brass atomizer tip, crucifix, cocklebur? How does a fence staple, rubber eraser, tag fastener, glass bead, locket, shoe button, wristwatch, or pebble end up in someone's stomach? Found objects yield found poetry in an inventory located in Chevalier Jackson's papers at the National Library of Medicine:

*Child alone in room found hairpin under pillow
Nickel and half dollar in a glass of water, child
pretended to drink*

*Was playing on school ground, afraid of losing 50 ct
piece put it in her mouth*

*Eating mashed potatoes, patient remembered that
while mashing potatoes, small piece of enamel
came off the pan, meant to throw potatoes away
but forgot*

Playing around "wicker chair"

*Safety pin in mouth, suddenly stepped on dog's foot
Put toy in his mouth to hide it from sister*

*Patient playing with tin cup containing a white pearl
button. Child threw cup up, patient's mouth was
open and button fell in*

Eating clam chowder

Eating grape fruit

Suffering of melancholy

Alone on floor with pile of buttons

All quotes are taken from Chevalier Jackson's *Diseases of the Air and Food Passages of Foreign Body Origin* (Philadelphia: W.B. Saunders, 1936); "New Mechanical Problems in the Bronchoscopic Extraction of Foreign Bodies from the Lungs and Esophagus," *Transactions of the American Laryngological, Rhinological, and Otolological Society*, no. 27 (1921), pp. 52–94; and *Bronchoscopy and Esophagoscopy: A Manual of Peroral Endoscopy and Laryngeal Surgery* (Philadelphia: W.B. Saunders, 1922).

This text is an adapted excerpt from Mary Cappello, *Swallow: Foreign Bodies, Their Ingestion, Inspiration, and the Curious Doctor Who Extracted Them* (New York: The New Press, 2011).