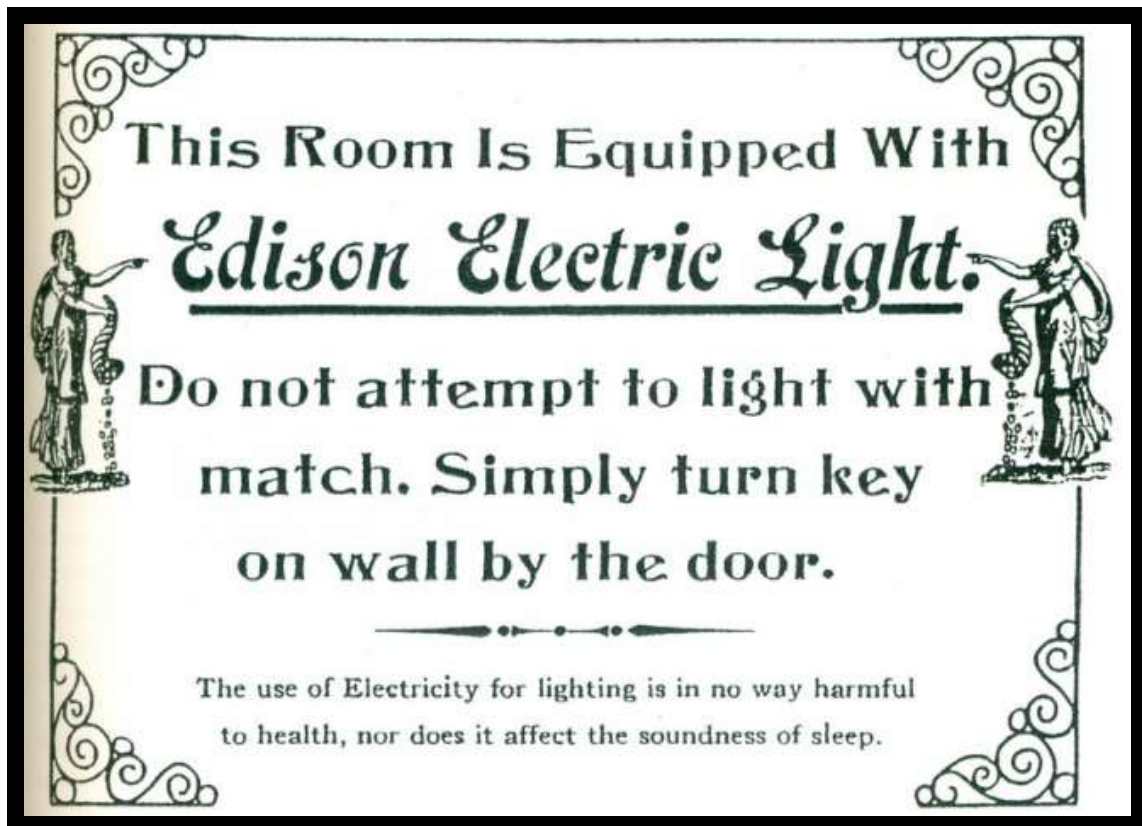


No Match Required



CARTOONS AND EARLY HISTORY

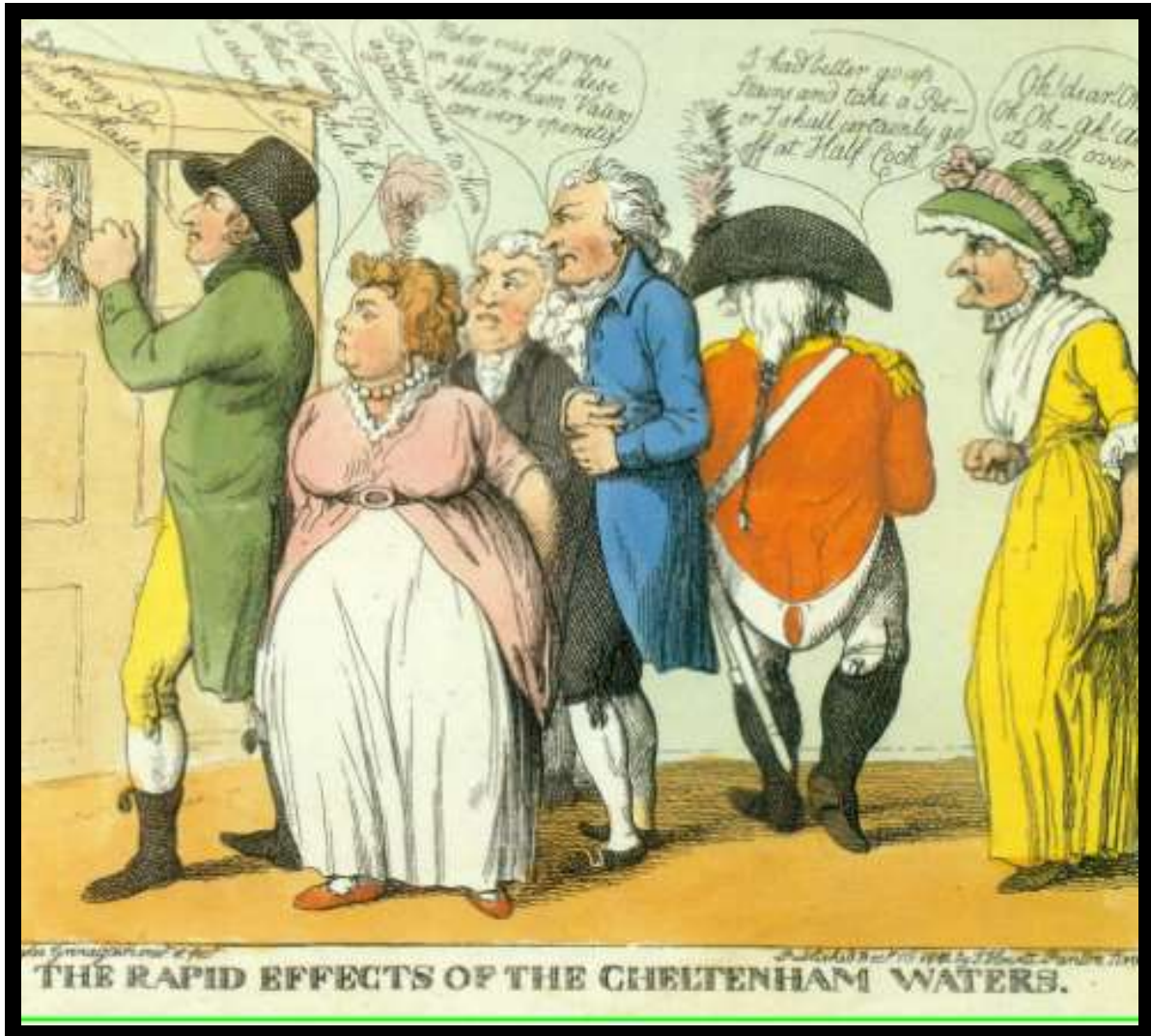
BUILDING ENGINEERING SERVICES

BRIAN ROBERTS

Put That In Your Pipe



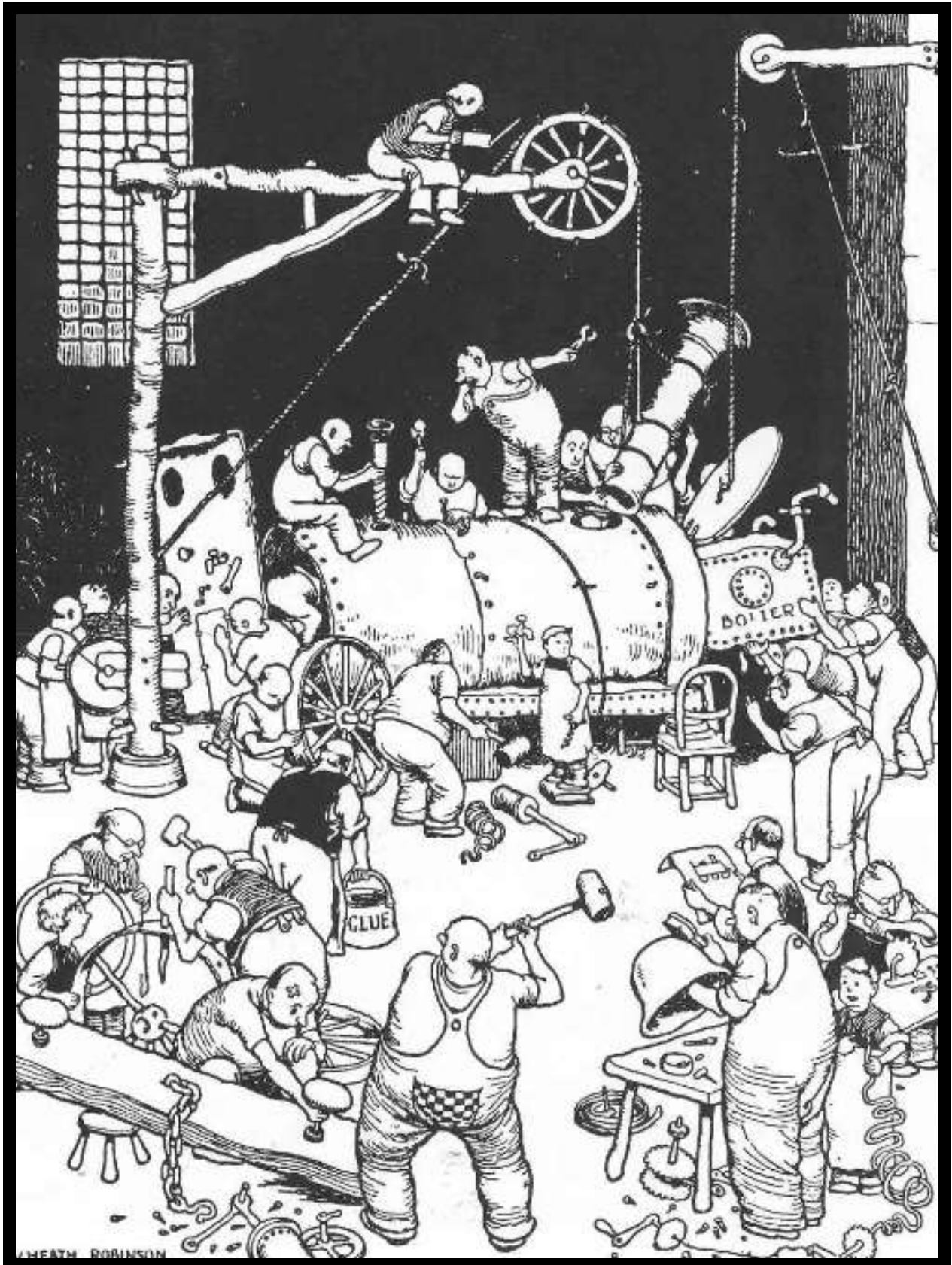
Taking The Waters Can Have Unfortunate Consequences



Many cartoons and illustrations, dating back some seven hundred years, show that a variety of humour has been present in public and private life relating the building engineering services we all rely on. These services include cold and hot water supply, heating, ventilation, air conditioning, lighting, plumbing and sanitation. There are many more.

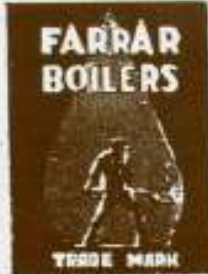
The pictures which follow have been collected over some forty-plus years by the Heritage Group and are taken from their Archive and website. Some originally appeared in newspapers and magazines, on postcards or company advertising material- ranging from Thomas Crapper to Carrier Engineering Corporation (e.g. the cartoon strips pages on pages 34 to 44). Other pictures have appeared in Heritage Group Publications (*The Magic of Hot Water* and *The Quest for Comfort*) and even on the covers of the *CIBSE Journal*. Such is our industry!

How Not to Make a Boiler 1935



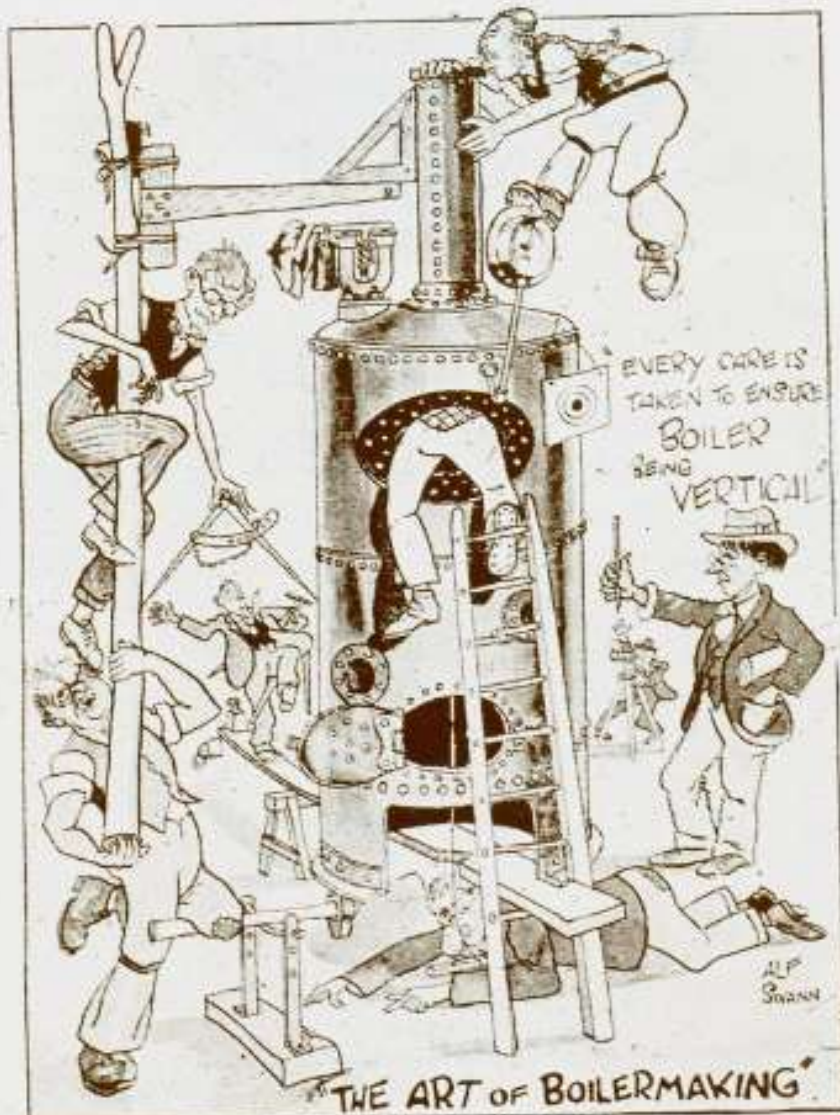
The Art of Boiler Making 1947

1887



1947

THE PUBLICATION OF THIS CATALOGUE
COMMEMORATES 60 YEARS DEVOTED
TO "THE ART OF BOILERMAKING"



A Heated Confrontation



Reproduced by permission of Punch

"Thank God You're here"

In A Heated Debate 1951

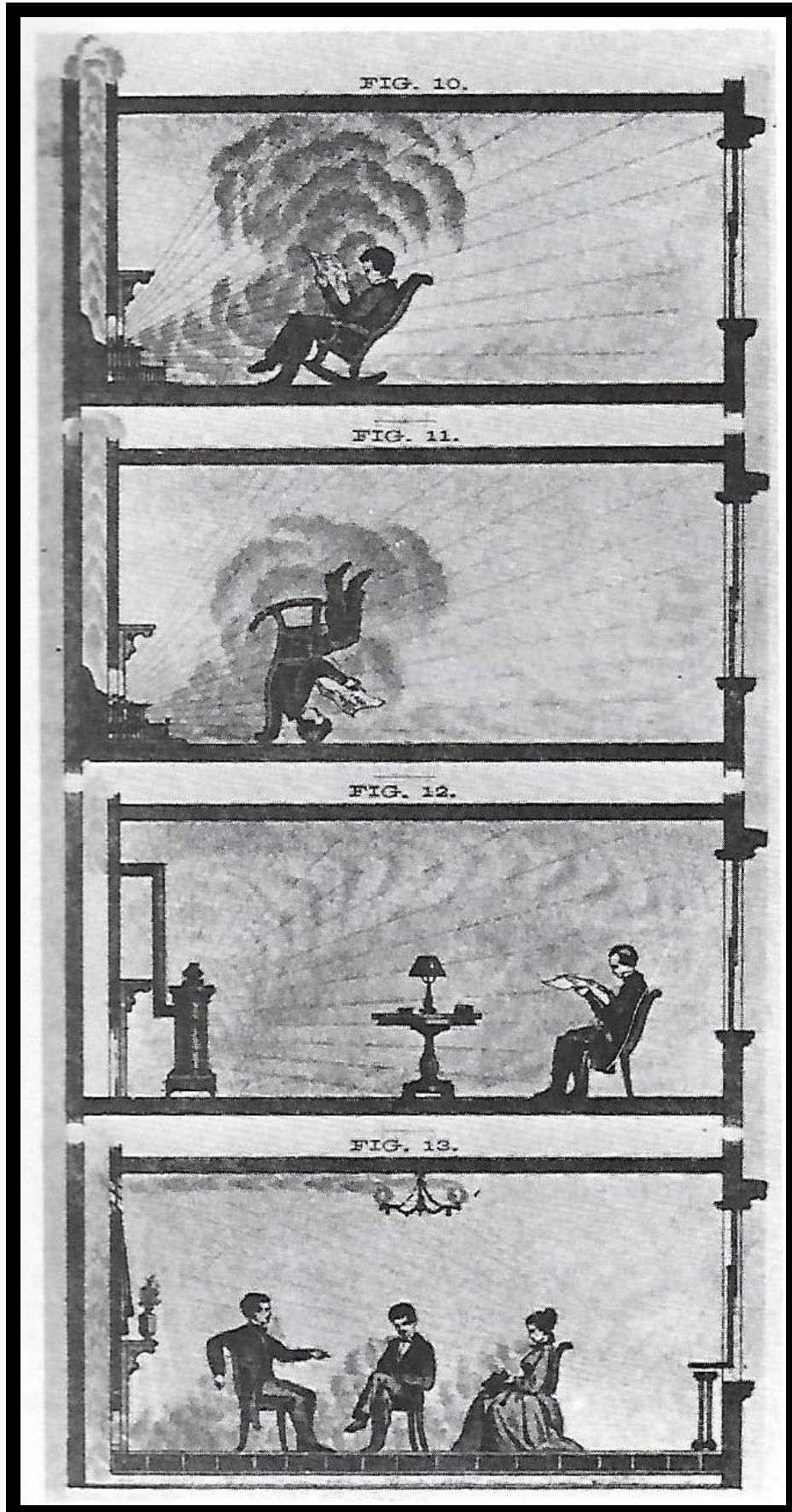
LONDON LAUGHS (No. 4,879) By LEE



“PHEW!”

“Heat emission from Members is brought into account in controlling the temperature of the Chamber.” (Report on new House of Commons.)

Principles of Warming 1871



Principles Continued

Fig. 10.13 Popular exposition of the principles of warming and ventilating. These illustrations were projected onto a screen by Lewis W. Leeds during his 1866–67 lecture series in the Franklin Institute, Philadelphia. They appear in his *Treatise on Ventilation* (New York, 1871). The clouds represent air exhaled and thus vitiated. The straight lines represent radiated heat. *Fig. 10* shows how feet are chilled by cold current from the closed window while reader breathes warm but vitiated air. *Fig. 11* shows how, with the given heating system, one may “keep the feet warmer than the head, and the back warmer than the face.” *Fig. 12* notes the radiation from the man’s back to the cold window, chilling his back and legs. The room’s air is totally vitiated. *Fig. 13* depicts an optimum condition. Some fresh air is admitted to the room just above the radiator at right. Vitiating air is removed at floor level (*left*) and from the gas lighting fixture near the ceiling.

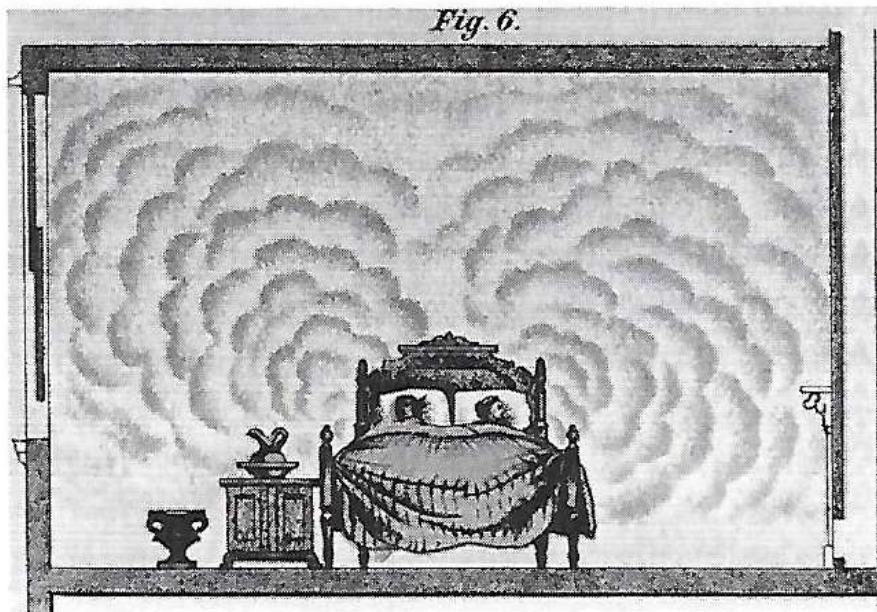
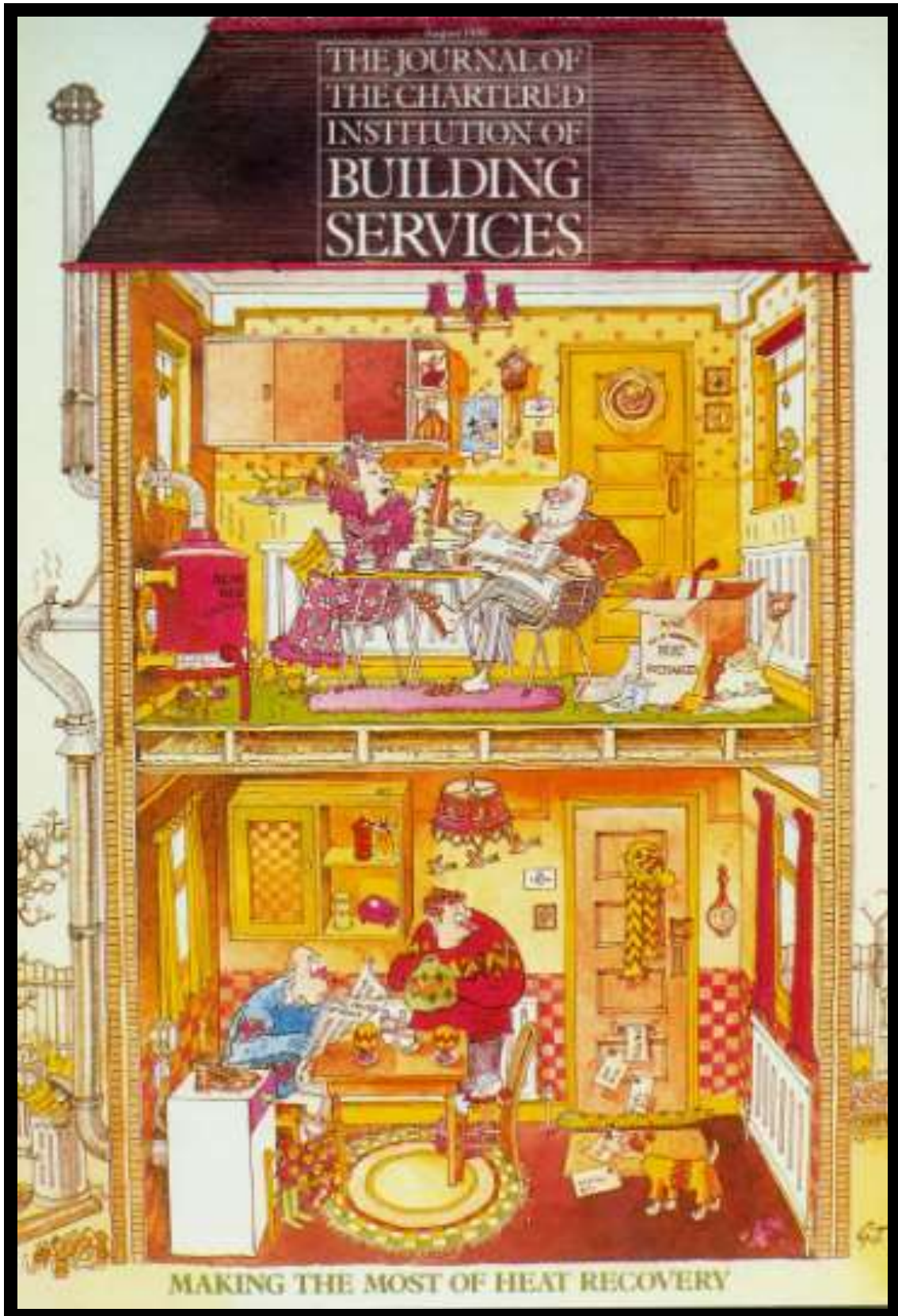


Fig. 10.15 The open window, at left, permits cold air to enter, but the air flows across the floor and up the chimney while the sleeping victims are surrounded by the air that they have vitiated. Lewis W. Leeds, *Treatise on Ventilation* (New York, 1871) fig. 6.

Making A Splash at Butlins 1980



Heat Recovery In Action 1987



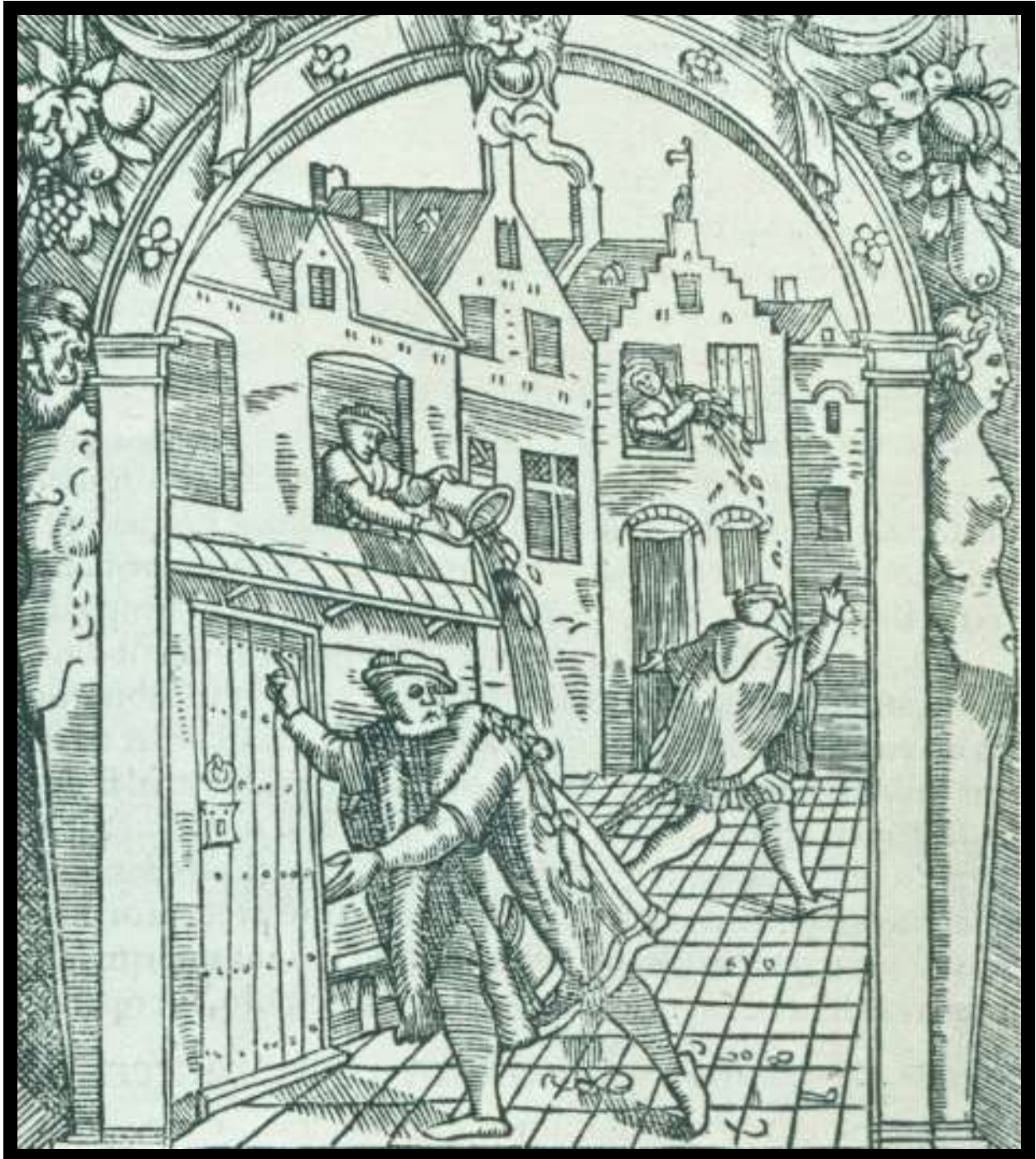
Testing the Electric Light 1884



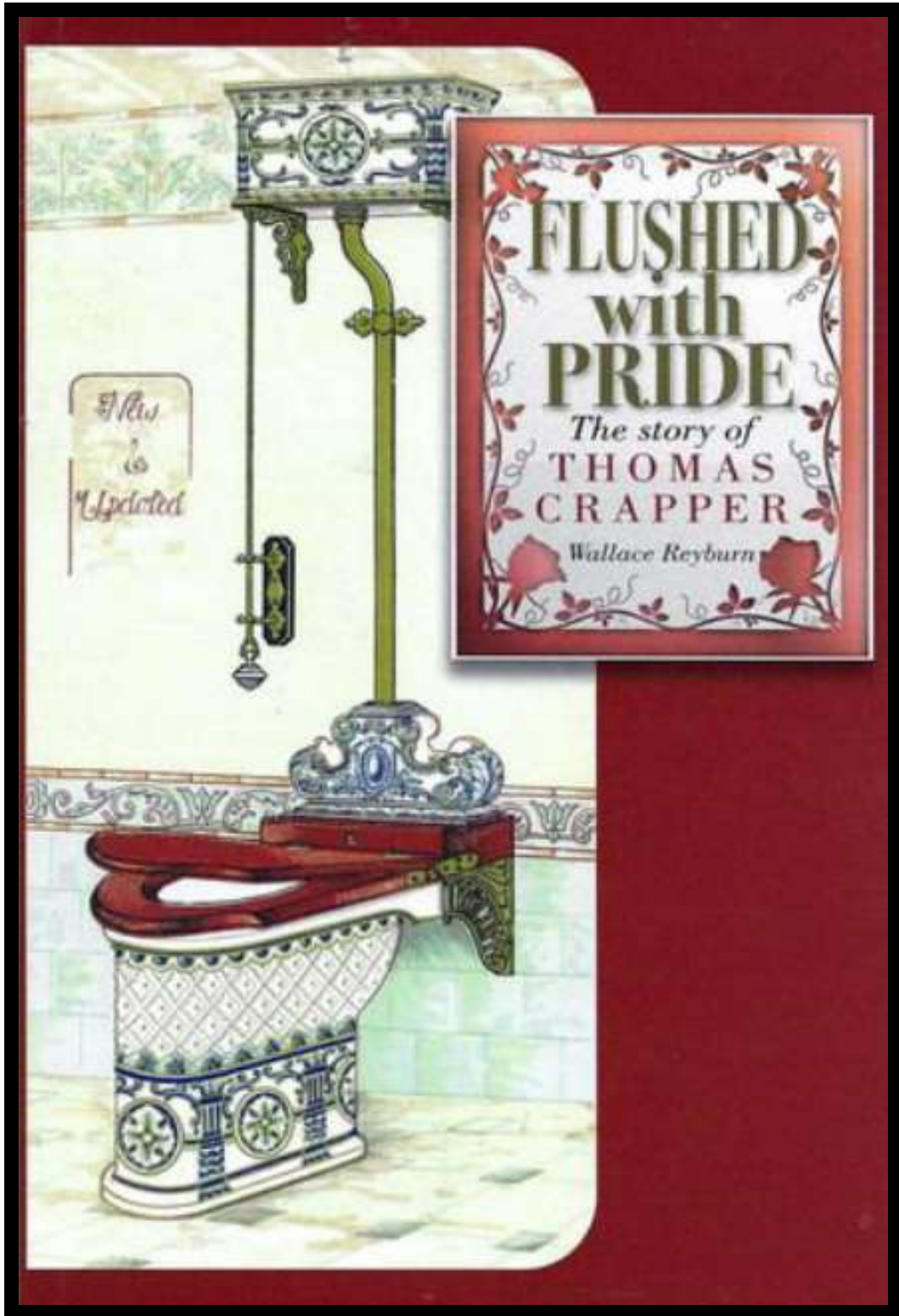
Dangers of the Electric Light c. 1890



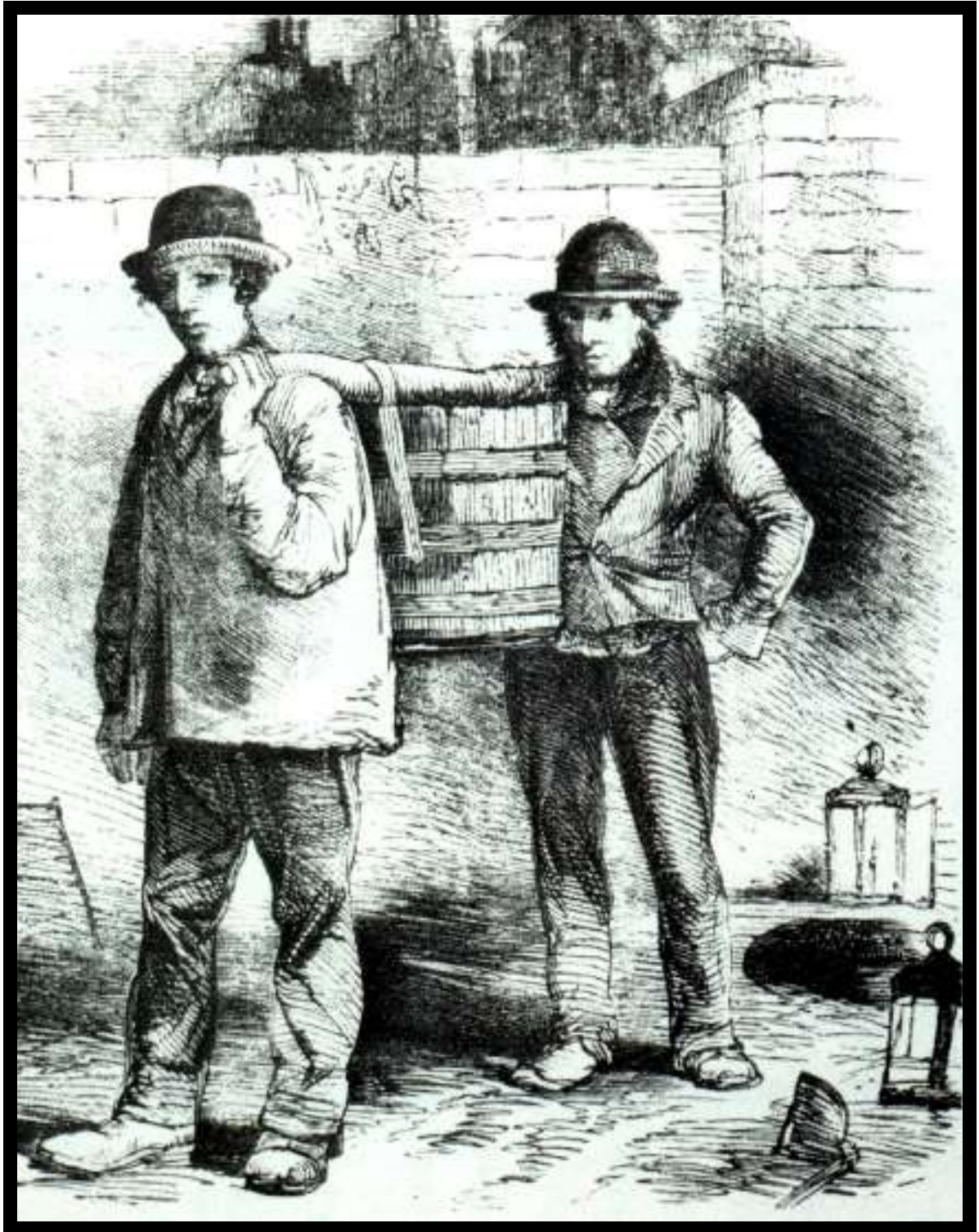
Garde L'eau (Middle Ages)



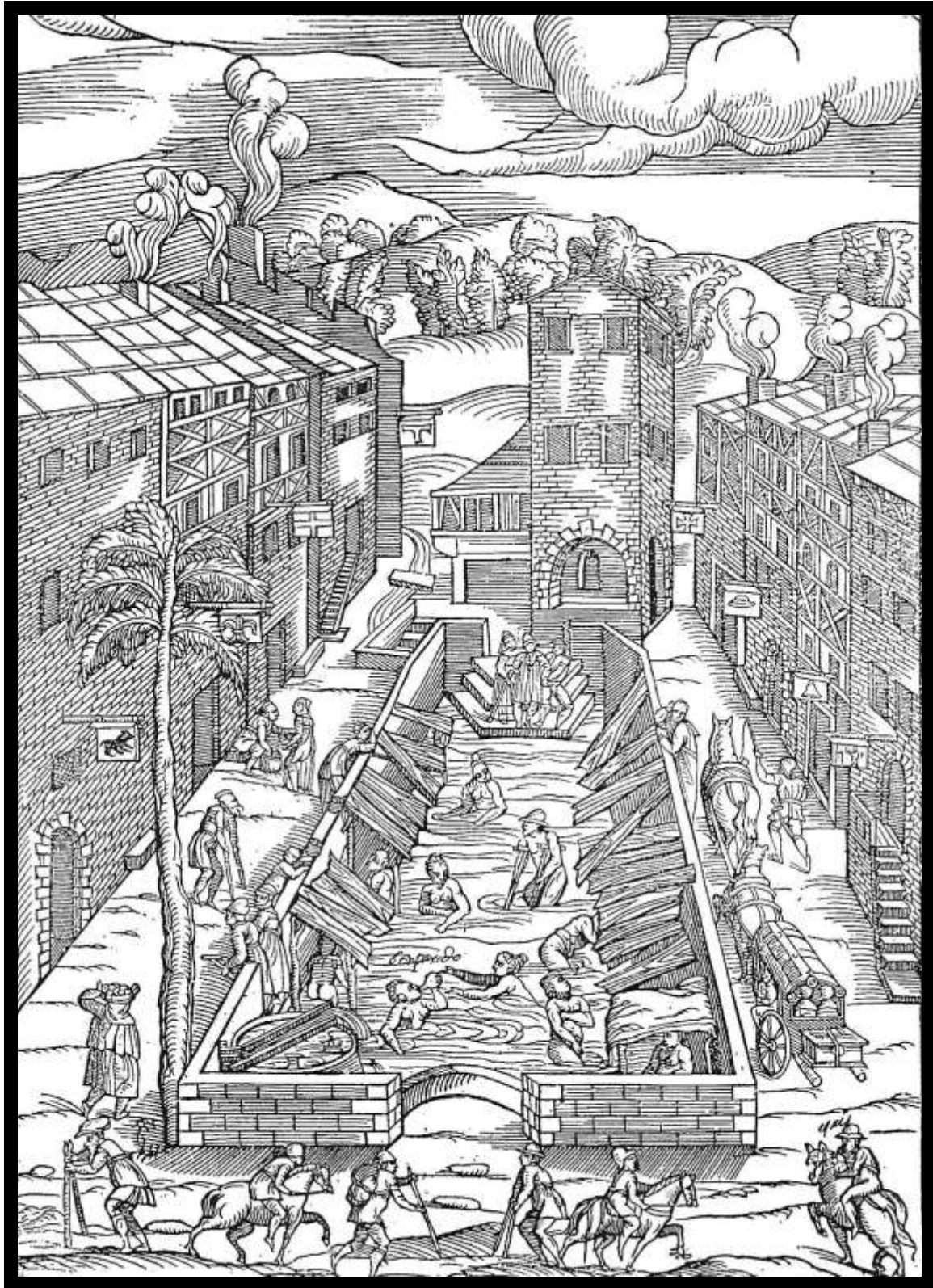
Flushed with Pride



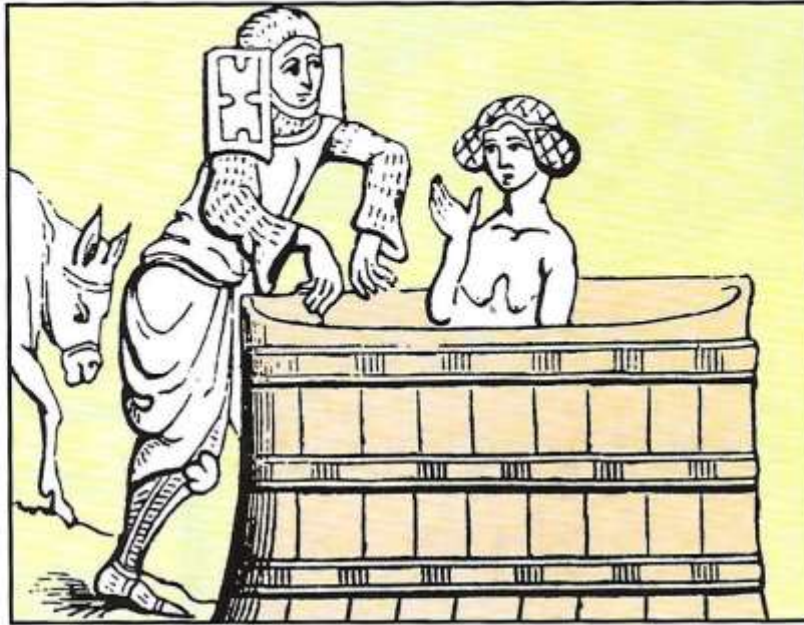
Collecting Night Soil - Early 1800s



When In Rome 1687



Rub A Dub-Dub 13c



*Plate 2. Medieval Bath Tub. (Old House Journal, October 1991, p.37)
Tubs were of barrel-like construction and fashioned by a cooper.*

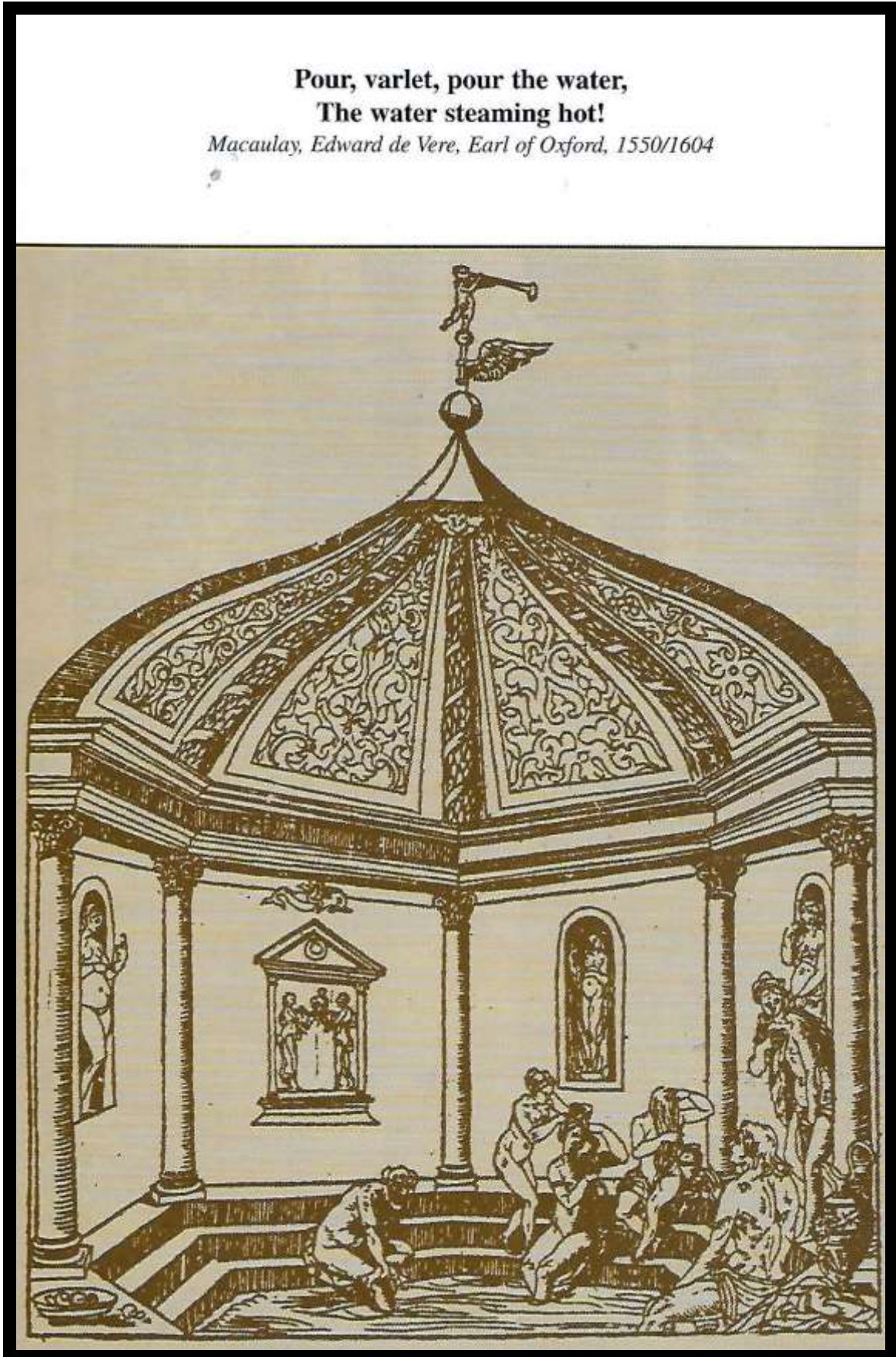


*Plate 3. Fresco Painting by Niccolo di Segna. The Medieval Bath. Tuscany, Italy. 13th Century. (ADI, p.76).
A large bath like this probably stood in a bathroom, rather than being taken into a bedchamber. When the bath was enclosed by the tent-like curtains a sauna effect was achieved.*

Pour The Hot Water Varlet c. 1600

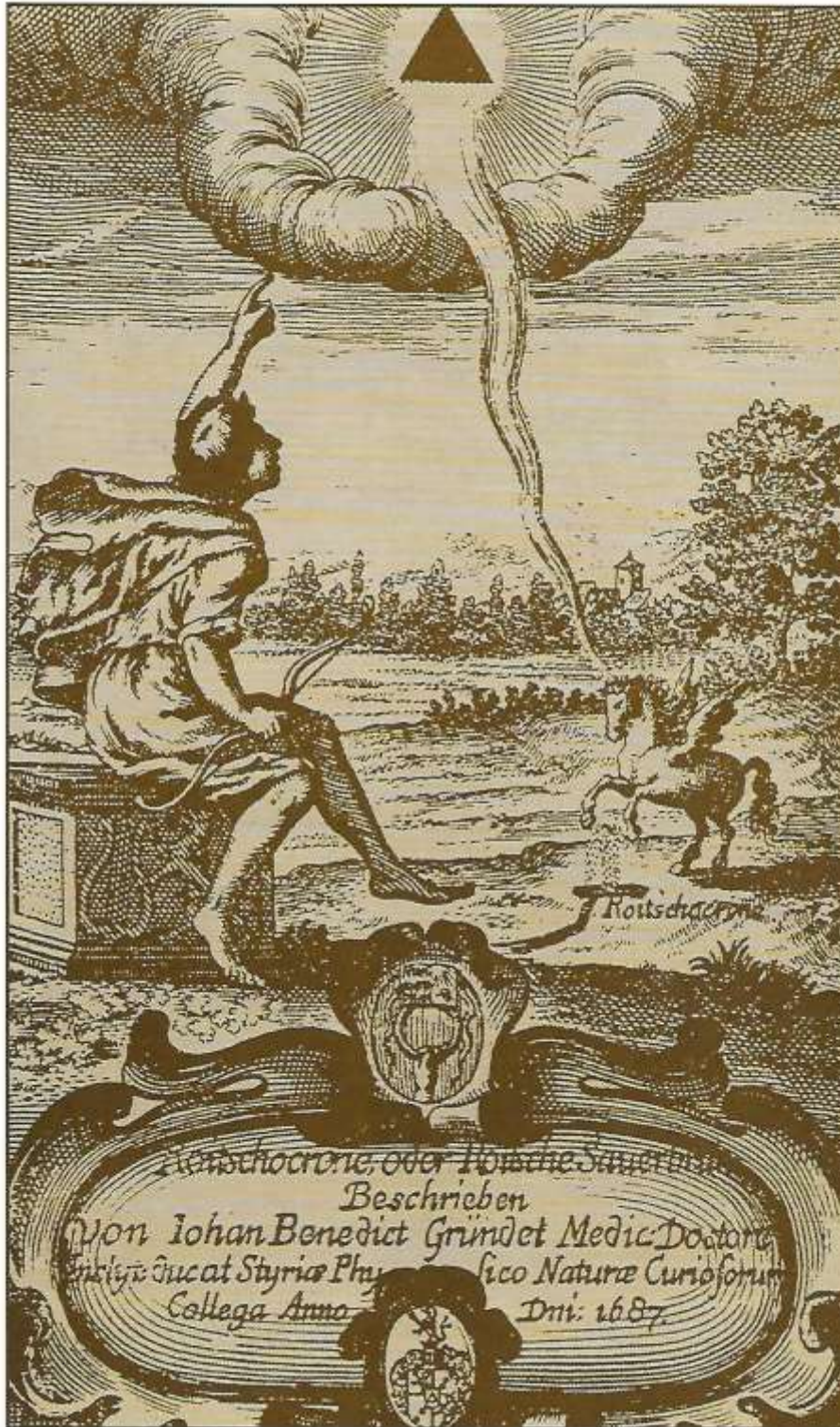
**Pour, varlet, pour the water,
The water steaming hot!**

Macaulay, Edward de Vere, Earl of Oxford, 1550/1604



A Hot Spring Bath 1687

A hot spring bath can cure anything but love
Japanese Folk Song.

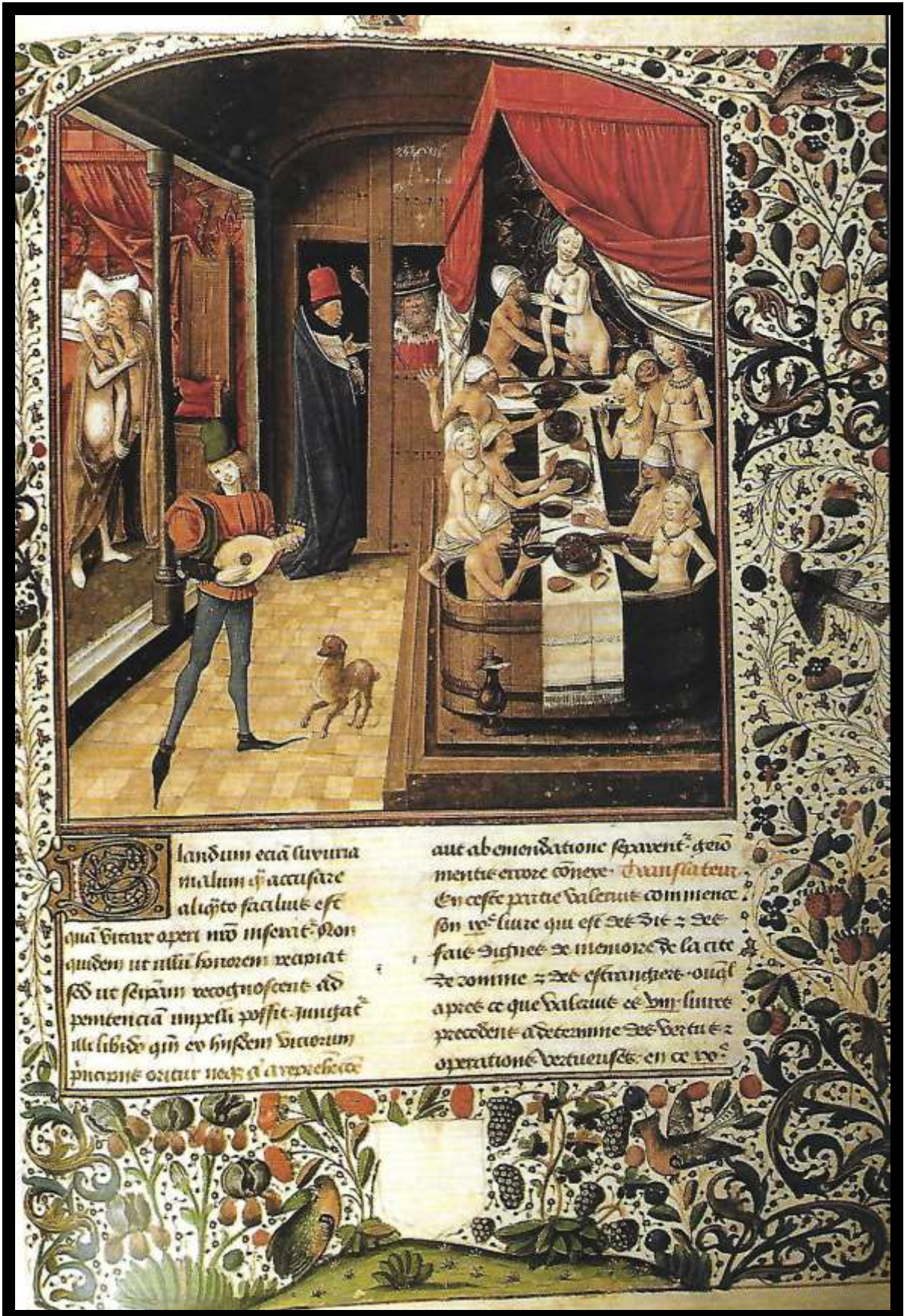


11. Illustration from a History of Rogaska Slatina Hot Springs, Czechoslovakia, 1687. (TTW, p.73).

Pleasures of Mixed Bathing 1470



Bathing: Amorous Indiscretions 15c



Blandum eam luxuria
 malum q̄ accusare
 aliquo factus est
 qua vitare oportet nō infentē. Non
 quidem ut illū honorem recipiat
 sed ut seipm̄ recognoscent ad
 penitentiā impelli possit. iungat
 illi libido qm̄ eo hūscem vitiorum
 p̄cipue oritur neq; a reuerētia

aut ab emendatione sperent. gerō
 mentis errore cōtere. *translatum*
 En ceste partie valeant commença
 son v̄ lūre qui est de die z de
 fait dignes de memoire de la cite
 de romme z de estrangeres. oual
 apres ce que valant ce v̄ lūre
 precedent a detennire des vertus z
 operationes vertueuses. en ce v̄.

A Pleasant Soak

Come to the bath house, rich and poor
The water is hot you may be sure,
With fragrant soap we wash your skin,
Then put you in the sweating bin;
And when you've had a beautiful sweat,
Your hair is cut, your blood is let,
And then, to finish, a good rub
And a pleasant soak in a soothing tub.

Christopher Scheur, Nuremburg, 1516.



*Plate 4. Illuminated Manuscript. A Lord, Possibly the Duke of Burgundy,
Taking a Bath. France, 15th Century. (BB, p.73)
The wooden bath is lined with a sheet, as a protection against splinters,
and is fitted with a canopy and curtains to trap the steam rising from the hot water.*

The Noble Life Outdoors 16c



Plate 6. Detail from a French Tapestry. *La Vie Seigneuriale (The Noble Life)*.
Taking a Bath Outdoors. Early 16th Century. (FHA, p.107).

A New Cock Wanted 1730



Clean Hands And Hearts

Clean hands and hearts may hope
To find the way to happiness
By using lots of soap.

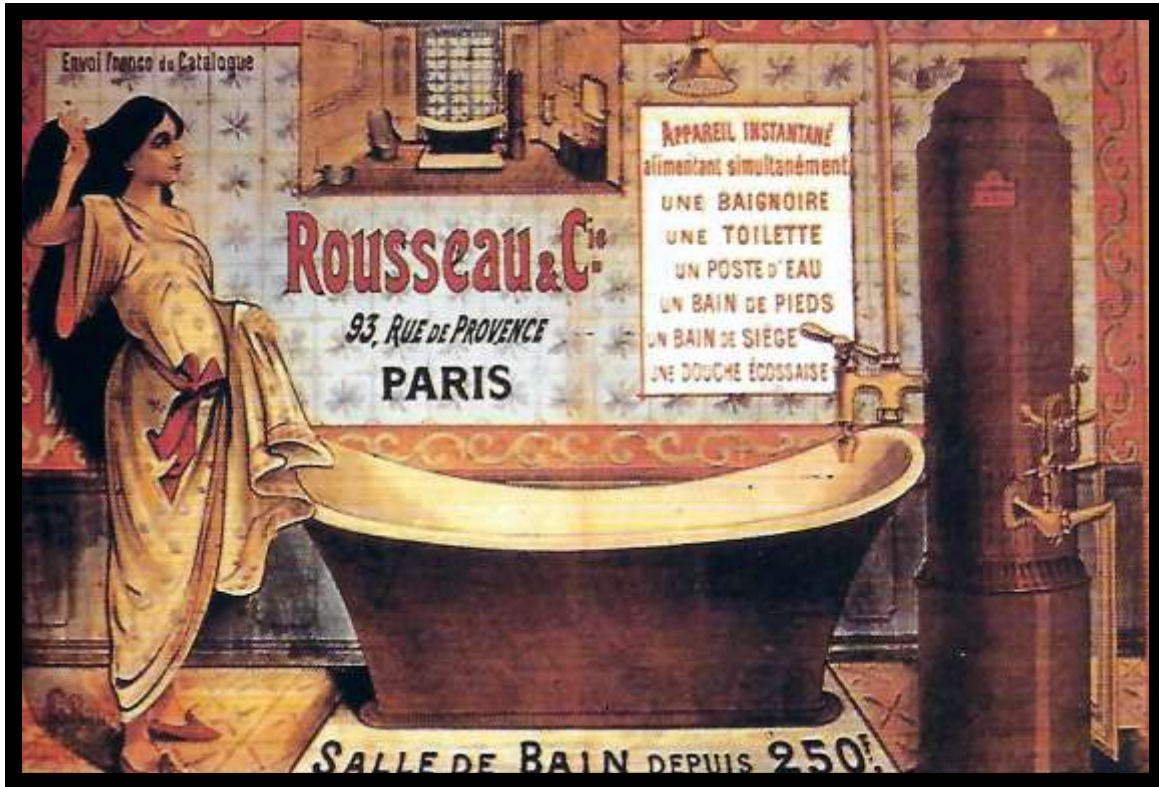


25. Victorian Engraving. Bath Night. (WL, p.9).

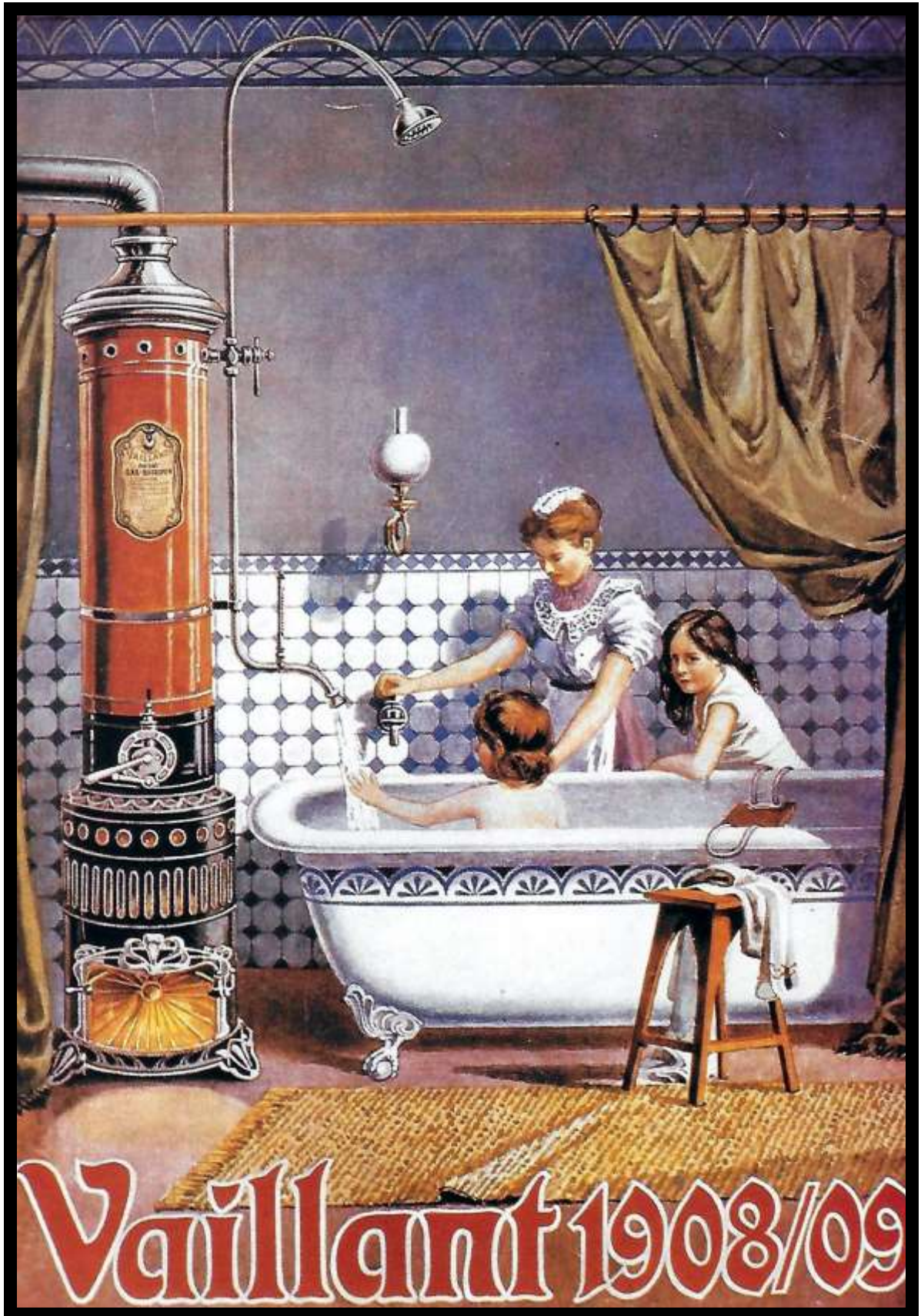


26. Advertisement. Pears' Soap for the Bath, probably c.1880. (WL, p.41).

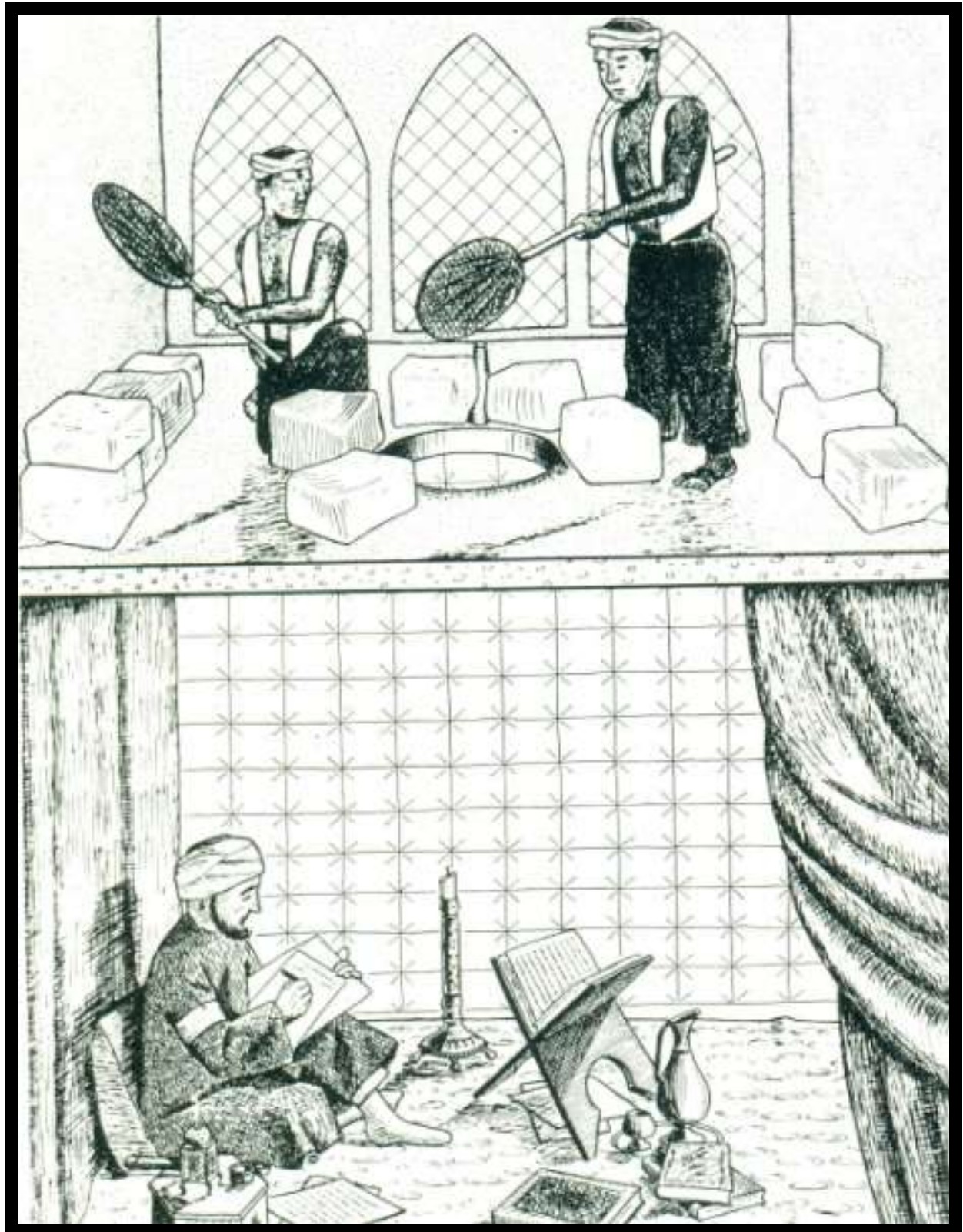
Say It With Flowers 1900



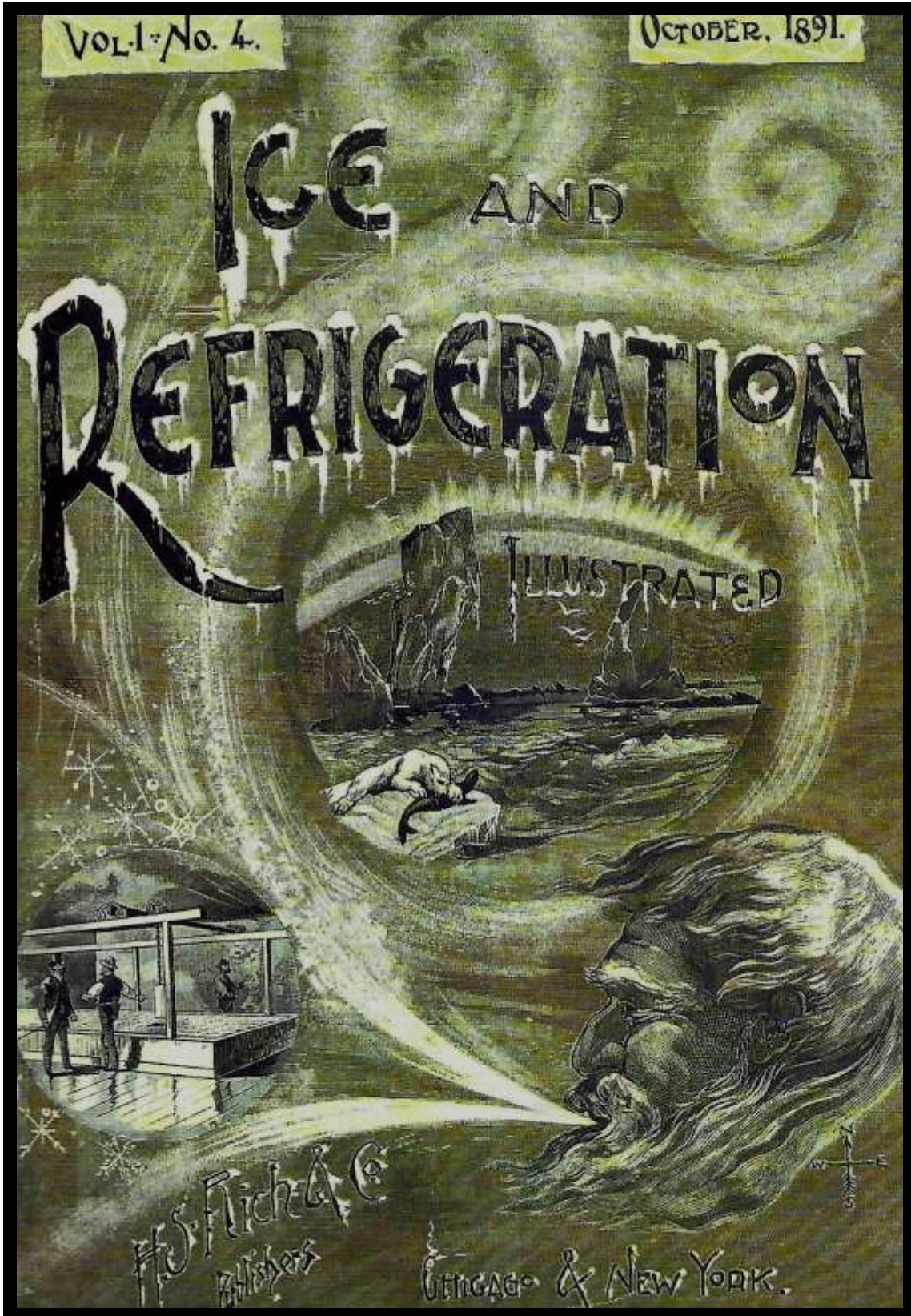
Only The Valiant 1909!



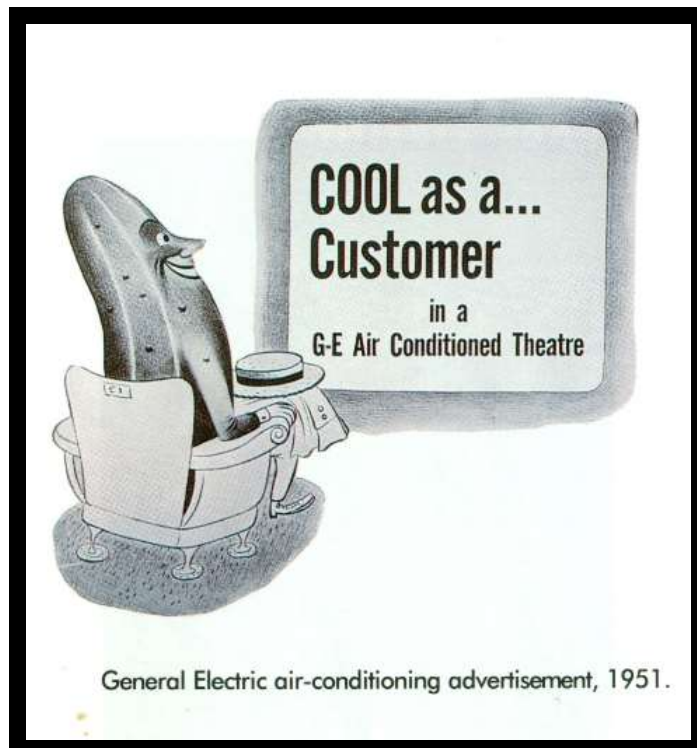
Ice Cold in Alex 779 AD



Blowing Cold 1891



Cool As a Cucumber



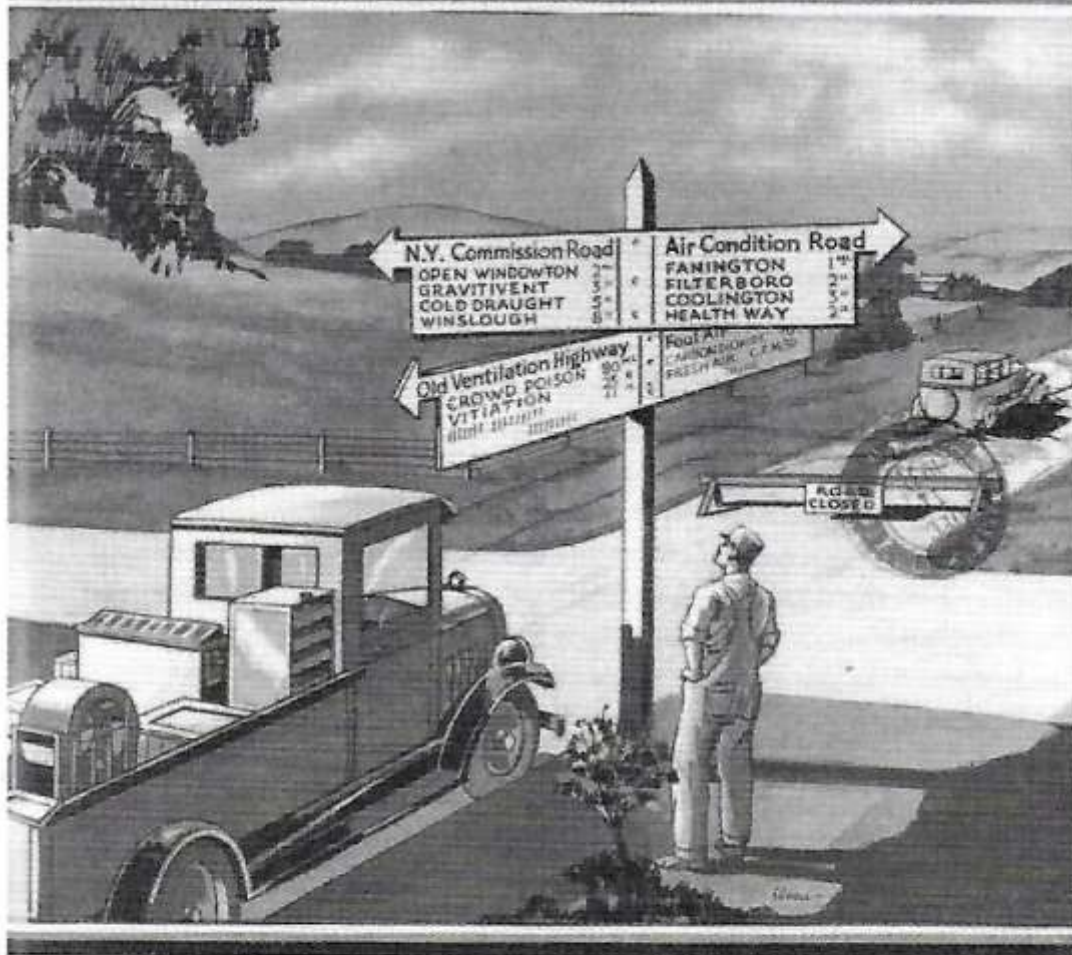
Any Complaints 1949



Ventilation Dilemma 1931

The AEROLOGIST

The Magazine of Air Conditioning
December, 1931



Ventilation controversy. Here one sees the confusion created by changing physiologic theory in ventilation practice. Fresh-air advocates used the report of the New York Commission on Ventilation to bolster their position that mechanical ventilation should be abandoned in favor of open windows. Air-conditioning advocates were headed in the opposite direction, toward man-made weather. (Aerologist [December 1931]: cover)

The Macaroni Case 1921

The Weather Vein

ADVENTURES OF
The Mechanical Weather Man
THE MACARONI CASE



The Messrs. Flour and Water
are in an awful mood
The macaroni that they make
comes back marked "Checked, No good."



They take it to their Foreman,
"What makes the stuff so bad!"
He says "If you'll just come with me,
to show you I'll be glad."

The Macaroni Case



"Our dryroom, sirs, is hopeless,
the goods *will* check and sour.
In spite of all that I can do
we're losing every hour."



"We either sweat too slowly,
which sours the stuff, just so,
Or else we dry so rapidly
we check it 'fore we know."



The partners then examine,
some goods the dealers say
Is just the kind they're looking for,
the best in every way.

The Macaroni Case



They write the other people
and ask them please to tell
What makes their goods so wonderful
and how they dry so well.



The answer came back quickly
its wording you can see
The partners read it hurriedly
and nodded happily.



They quickly 'phoned to Carrier
to come and tell them how
To make their plant a modern one
as fast as things allow.

The Macaroni Case



And with his usual promptness
comes "Mech", his face as smile,
"We'll have Ejector dryers here
within a little while."



"Mech" kept his word and shortly
their dryers were complete,
With automatic instruments
to regulate the heat.



And now when Flour and Water
their finished goods inspect,
They smile at competition for
their goods have no defect.

The Film Mystery 1921

The Weather Vein →

ADVENTURES OF
The Mechanical Weather Man
THE FILM MYSTERY



Film-em Brothers, movie-makers, register dismay,
A dozen cancelled contracts is the total for the day.



"Look here!" A wrathful Lab man's voice makes
Film-em Brothers quake—
"The piece of film I'm holding here is cloudy and
opaque!"

The Film Mystery



"And look at this!" The camera-man exudes an irate yell—
"The film I gotta use is scratched and full of dust as well!"



"And how in blazes can we work"—a crazed director cries,
"In ninety-six degrees of heat, with dust clouds in our eyes?"



"What's more, developing's a crime in weather like today!
The coating softens on the film, gets smudged, and 'pulls away.'"

The Film Mystery



"Zounds!" In bursts Sam, the dry-room man, and starts to rave and cuss—
"Conditioned Films, across the way, dry twice as fast as us!"



Then just as all seems inky gloom, there comes a ray of cheer,
(It's Mech—the grinning little scamp!) "What ho, my friends, I'm here!"



"Zing! Zip! No more close-ups today of trouble and despair—
We'll try instead a second reel called "*Clean Conditioned Air!*"

The Film Mystery



Then like a flash through all the plant there runs
the joyful news,
That Mech, the weather wonder-man, has killed the
movie blues!



And since that day when Film-em's films are shown
upon the screen,
The movie fans declare the show the best they've
ever seen.



So Film-em Brothers smile with glee—as well the
brothers may—
When contracts by the carload flood their office
every day.

Mystery of the Chemist's Shop 1921

The Weather Vein →

ADVENTURES OF

The Mechanical Weather Man

THE MYSTERY OF THE CHEMIST'S SHOP



The Messrs. Pill and Powder make chemicals and drugs,
Most everything from Paris Green to bottled little bugs.



Their drying kilns for powders, in spite of every care,
Will not dry uniformly, fast—they need *conditioned* air.

Mystery of the Chemist's Shop



And when they've left the dry kilns their powders
rare and dear
Become a caked and sorry mass in summer atmos-
phere.



The dust from open windows contaminates their
goods,
And too-moist air makes G. E. salts stick tight in
filling hoods.



Machine-rolled pills, when coated, are checked and
have no gloss,
"Mech" can avoid this trouble, too, and save their
daily loss.

Mystery of the Chemist's Shop



The Messrs. Pill and Powder, convinced by
"Mech's" display
Of wisdom, put it up to him to make their business
pay.



"Mech" waves his magic wand, then, conditioning
the air,
And all their costly chemicals which used to cause
despair



Are standardized exactly and made superior,
While everything competitive becomes inferior.