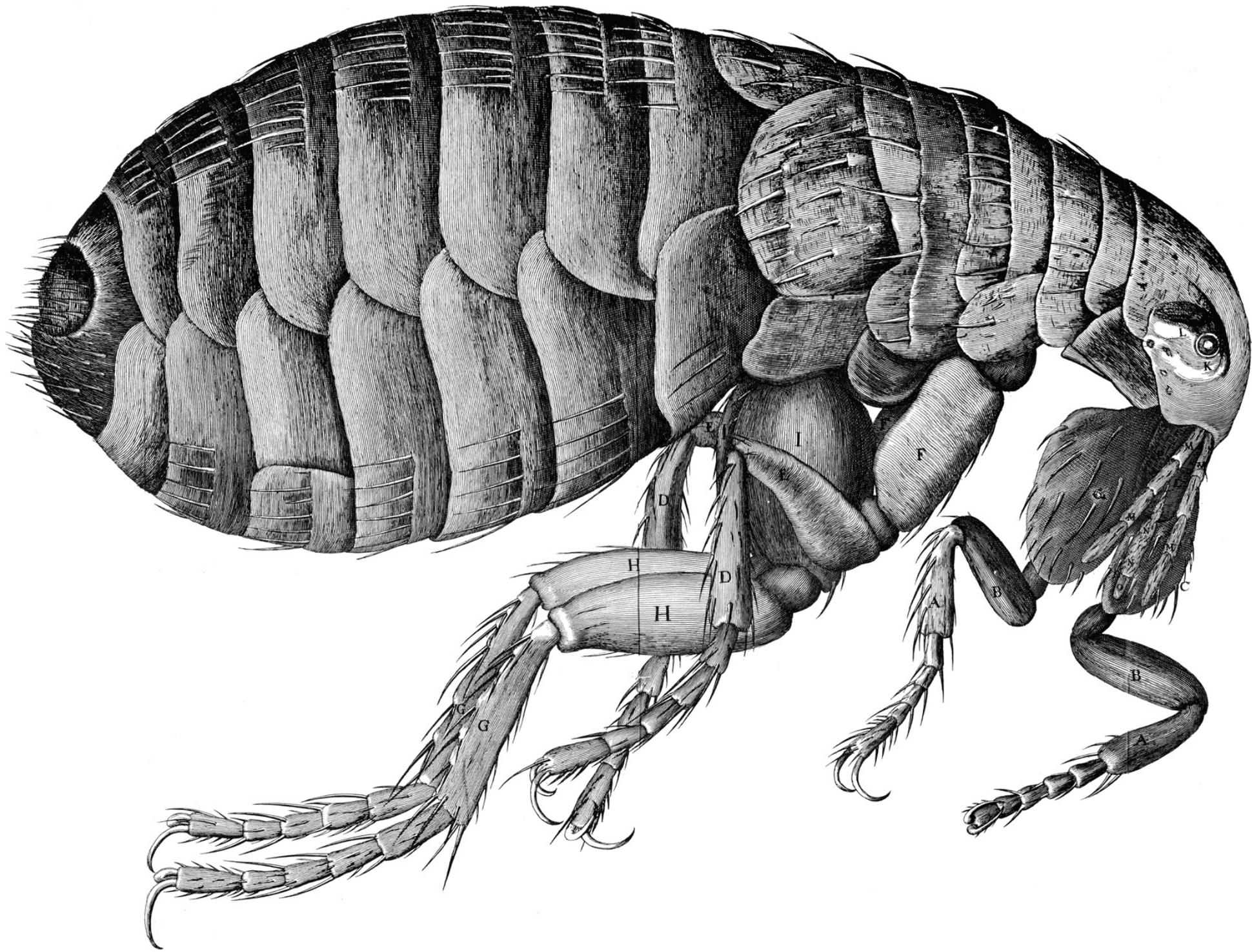


# Illustration of theories and data

CS 48N, Winter 2011

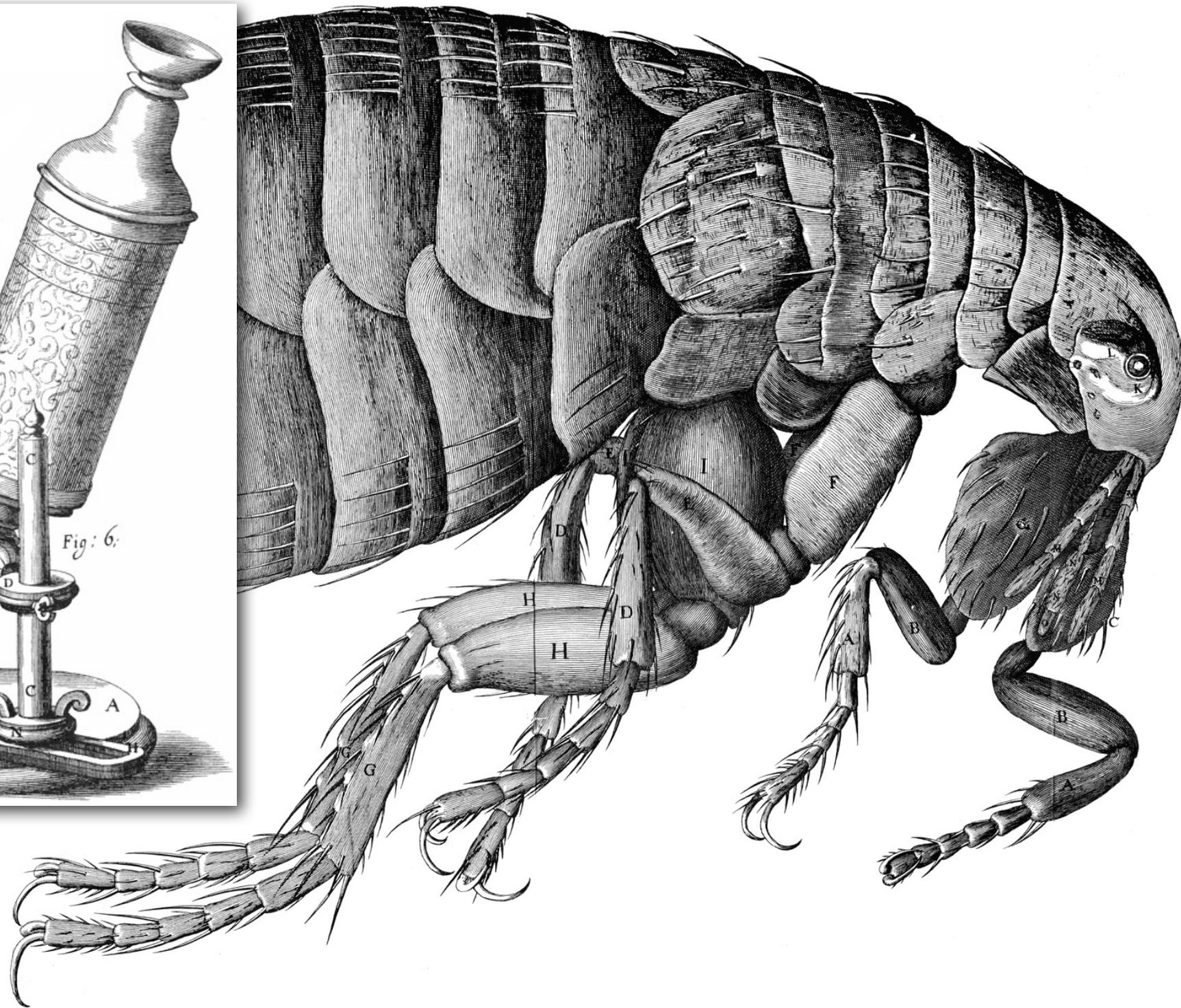
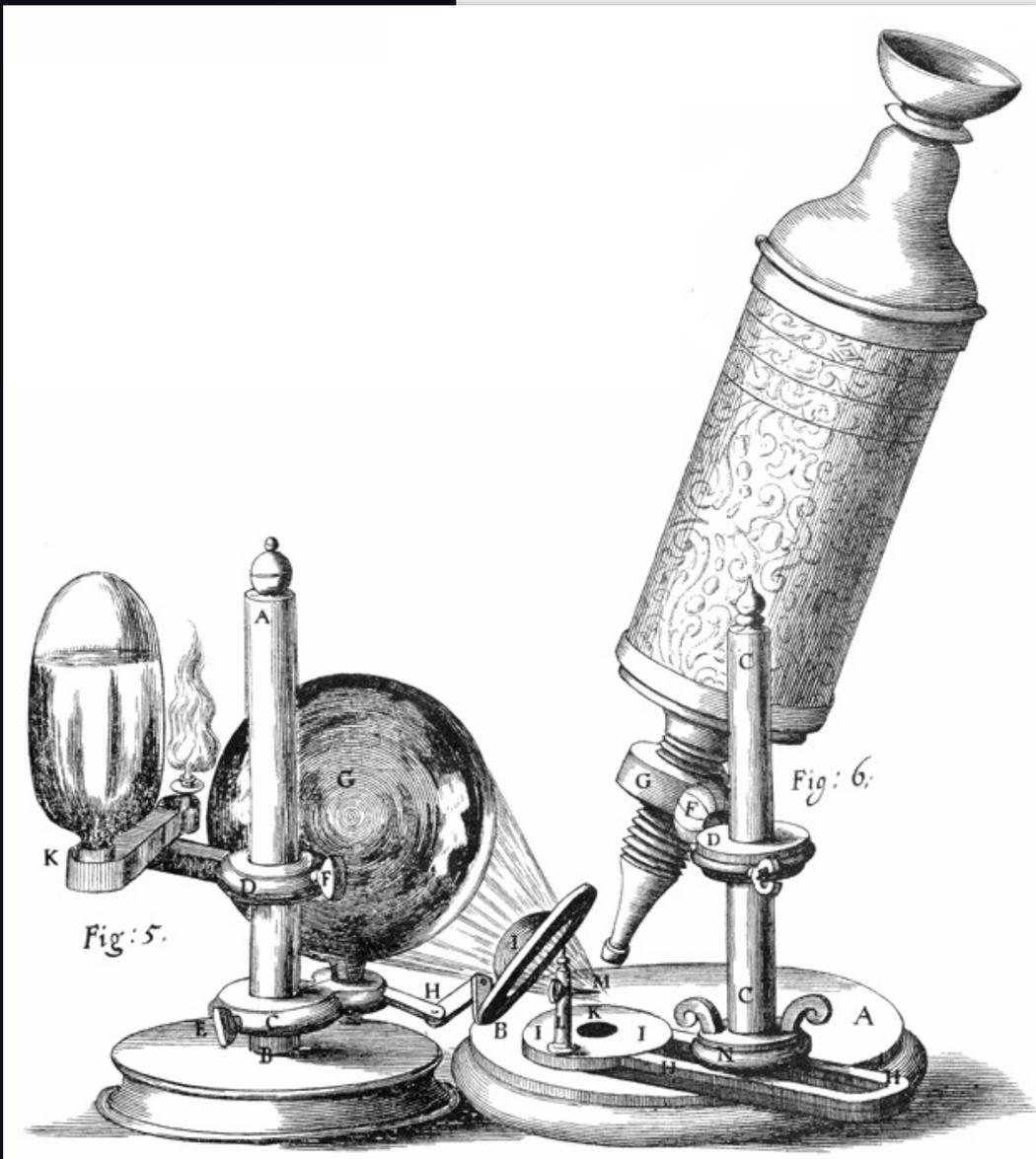


Marc Levoy  
Computer Science Department  
Stanford University



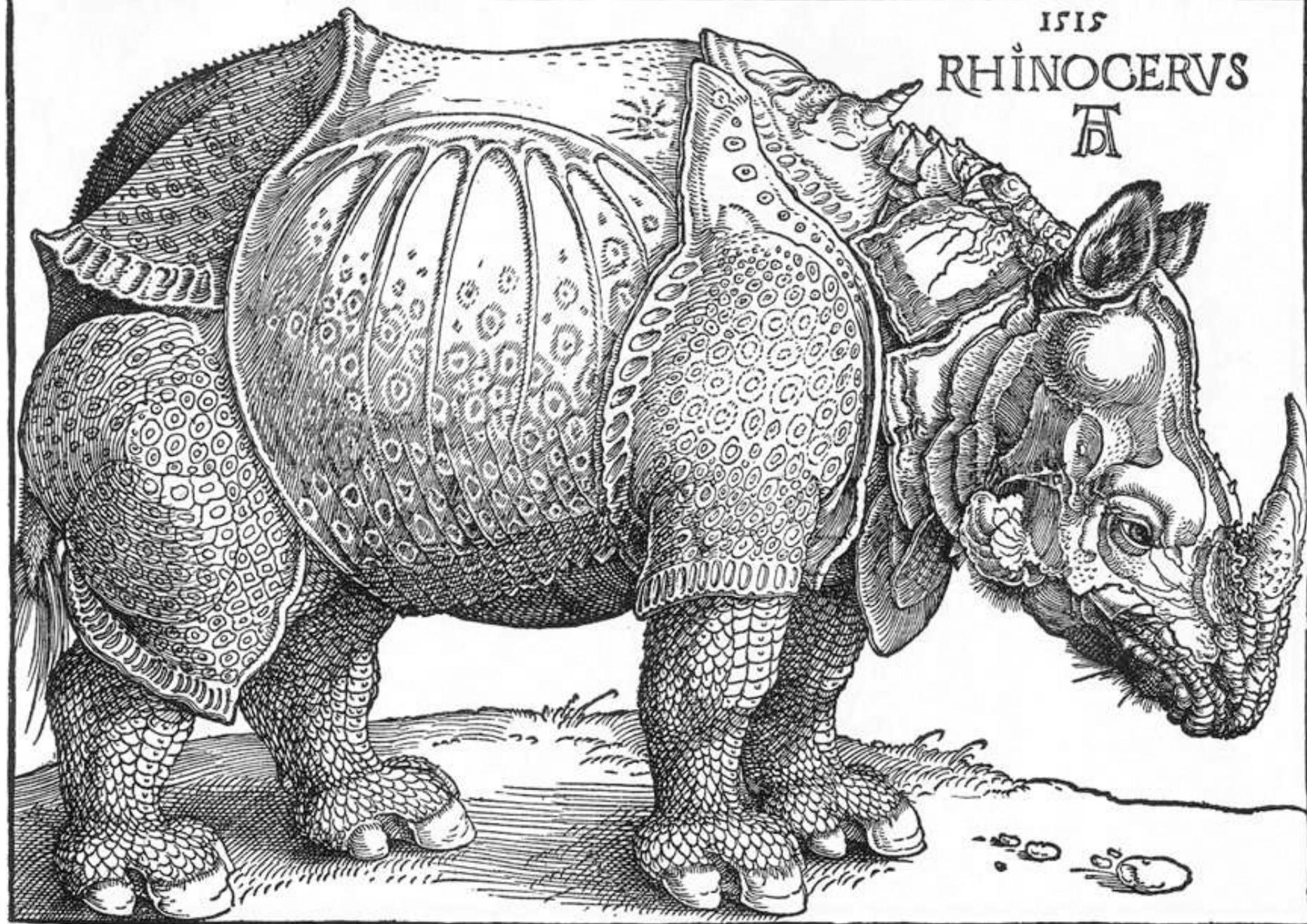
Robert Hooke, Micrographica (1665)





Robert Hooke, Micrographica (1665)

Nach Choistiegeburt/1513. Jar 2di. May hat man dem großmechtigsten König Emanuel von Portugal/gen Lysabona aus India pracht/  
ain solch lebendig Thier. das nennen sie Rhinoceros/Das ist hic mit all seiner gestalt Abconterfect. Es hat ein farb wie ein gepfreckte Schildkrot/vnd ist von dicken schal-  
len vberleget sehr fest/vnd ist in der gröss als der Heilffant/aber miderichter von baynen vnd sehr wehrhafftig es hat ein scharffstarck Horn vorn auff der Nasen /das bes-  
gundt es zu werzen wo es bey staynen ist / das da ein Sieg Thir ist/des Heilffantes Todesfeynde. Der Heilffant fürches fast vbel /den wo es Jhn ankumpt/so laufft Jhm  
das Thir mit dem kopff zwischen die forden bayn /vnd reist den Heilffanten vnten am bauch auff/vnd er würget ihn. des mag er sich nicht erwehren. dann das Thier ist also  
gewapnet/das ihm der Heilffant nichts thun kan/Sie sagen auch/das der Rhinoceros/Schnell/fraytig/vnd auch Lustig / sey.



Albrecht Dürer, Rhinoceros (1515)

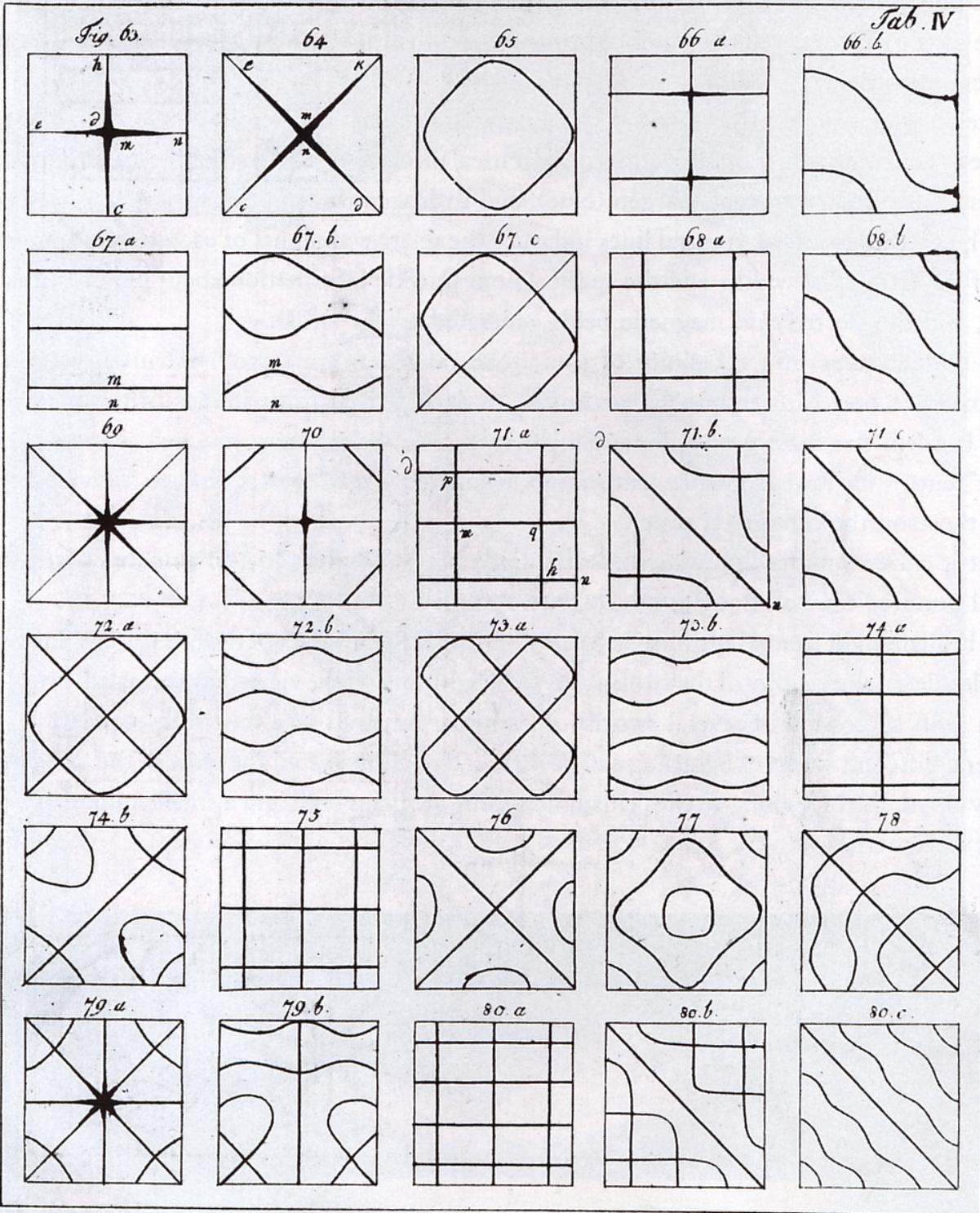


J.J. Audubon, *The Birds of America* (1838)



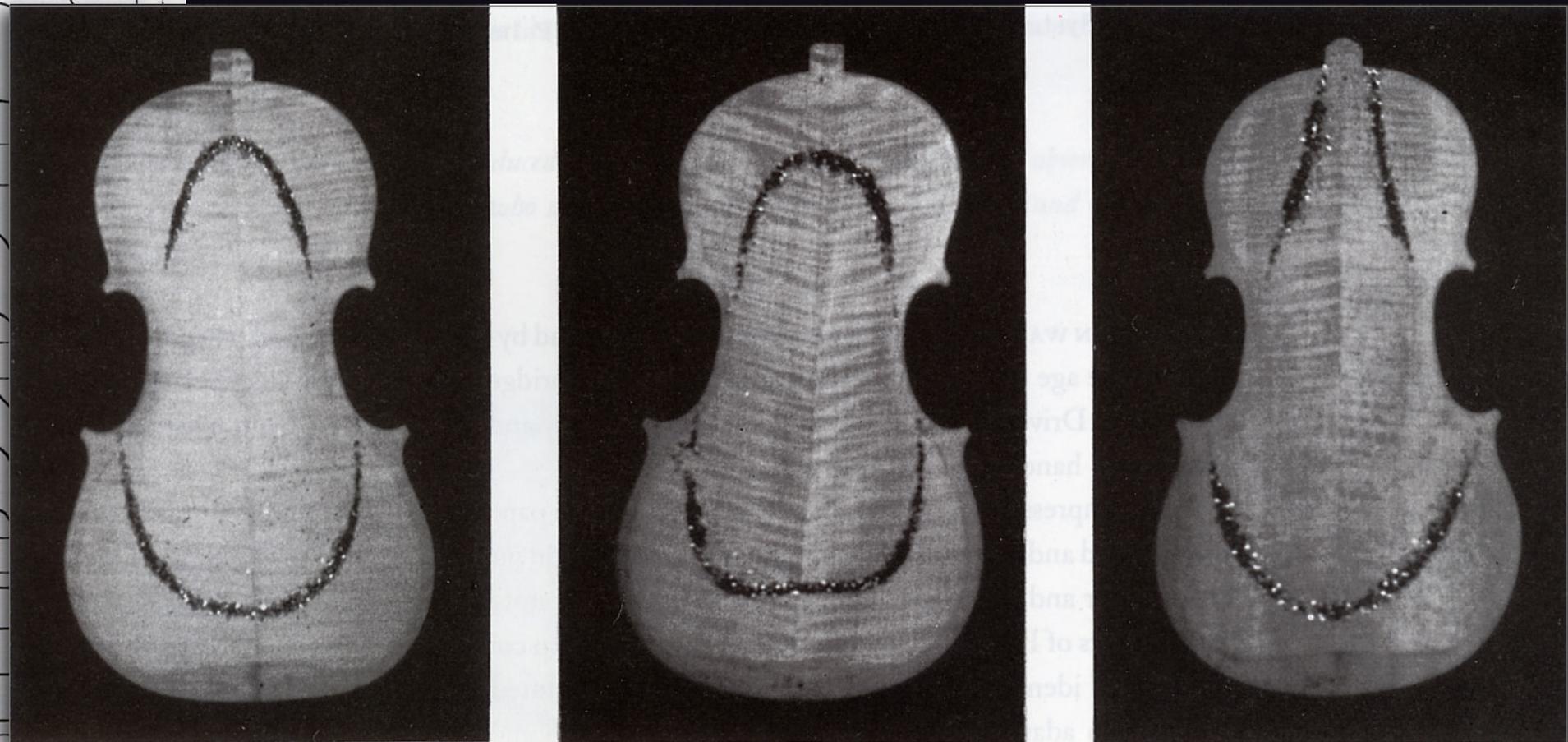
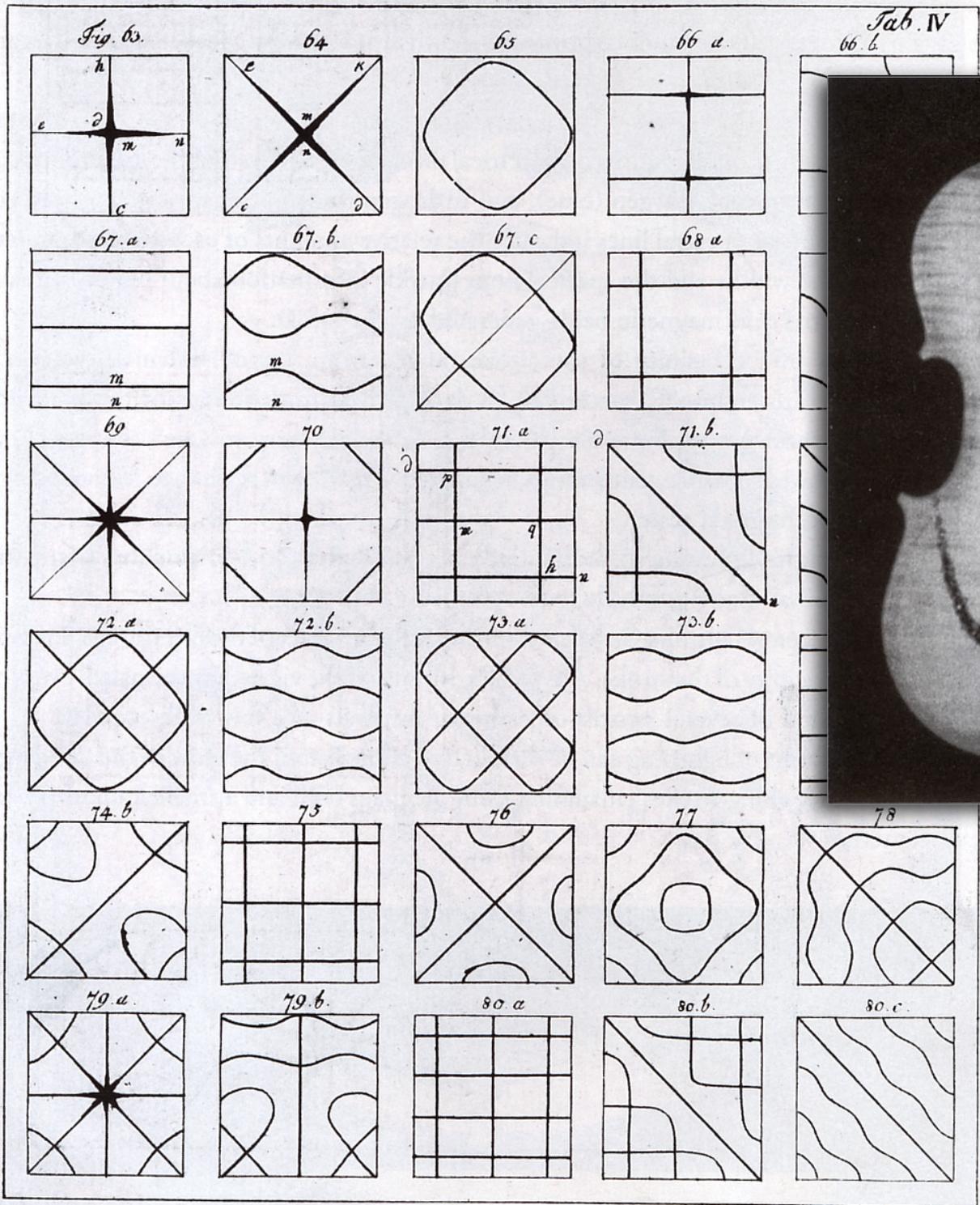
Louis Agassiz Fuertes (1874-1927)

Chladni's Akustik.

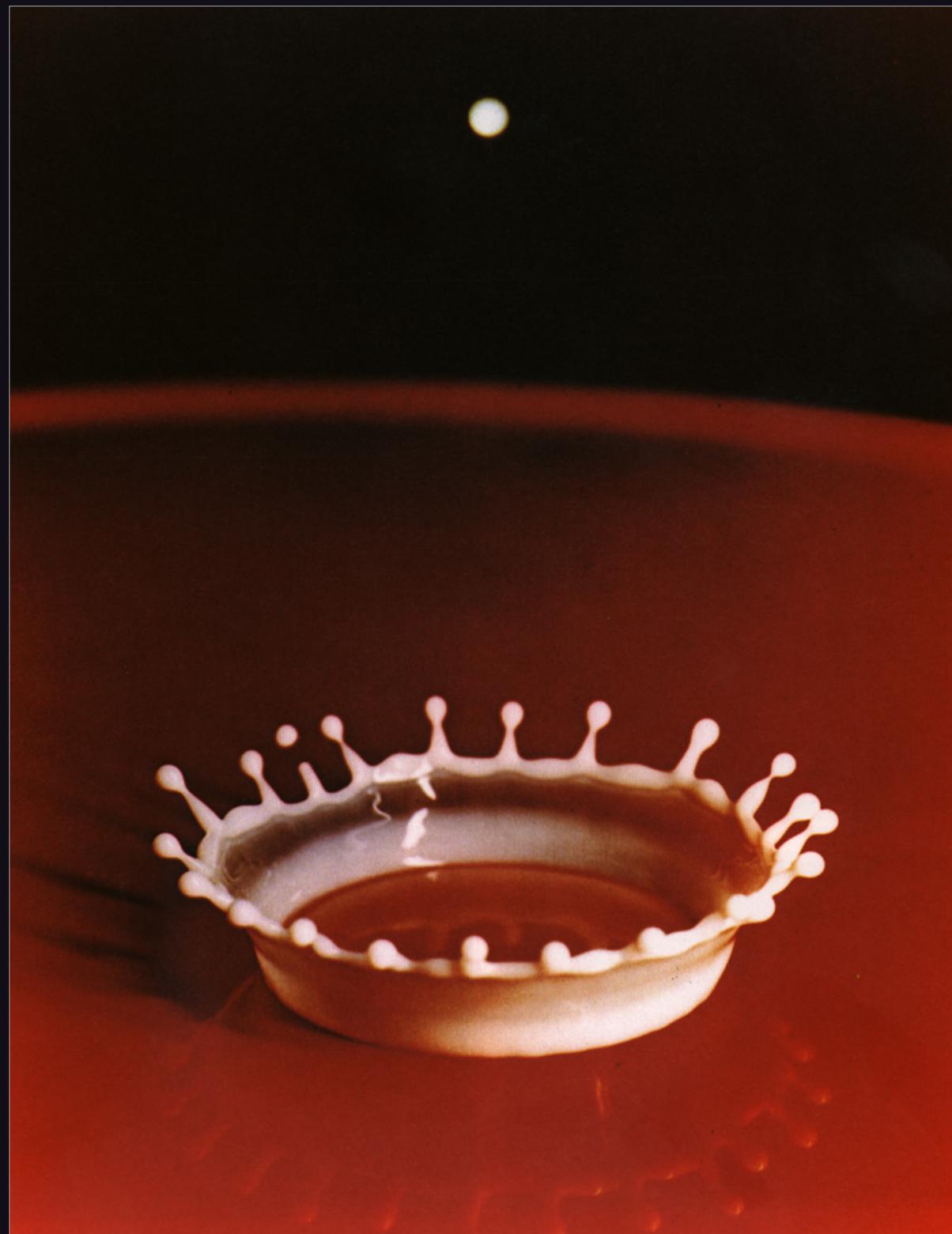


Ernst Chladni, Theory of Pitch (1782)

*Chladni's Akustik.*

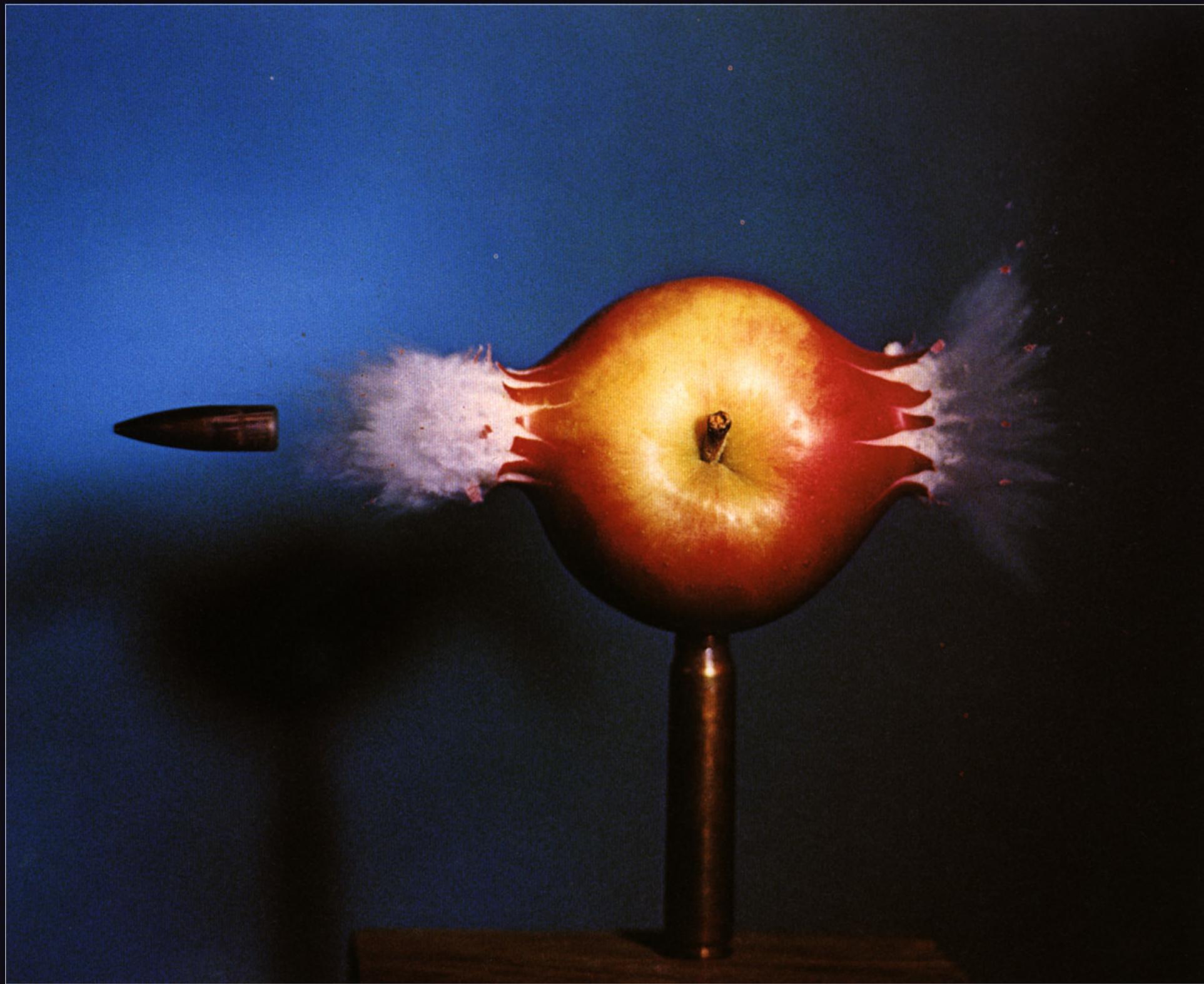


Carleen Hutchin, application of Chladni's theory to the construction of violins (1965)



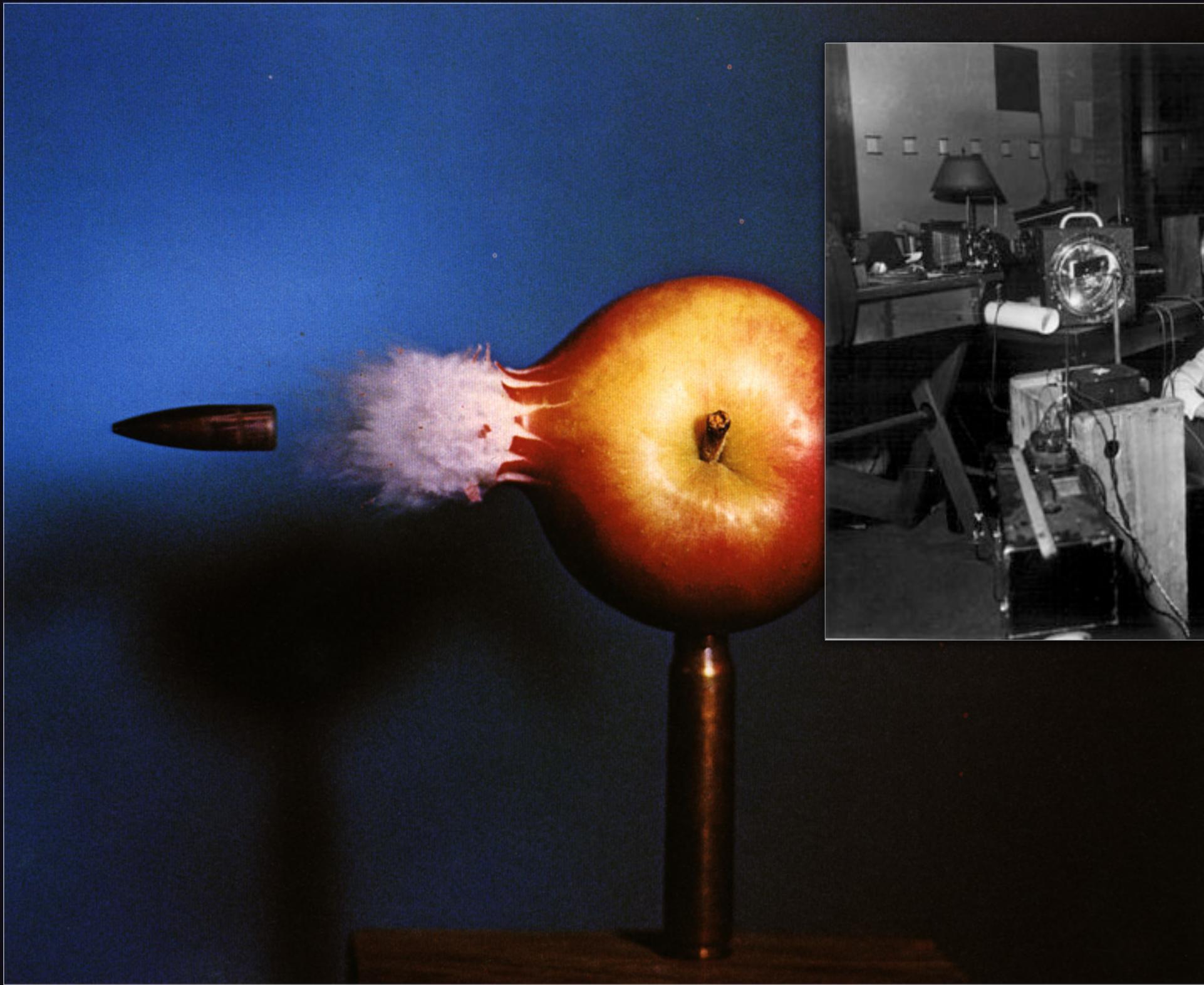
Harold ("Doc") Edgerton, Milk Splash (1935)





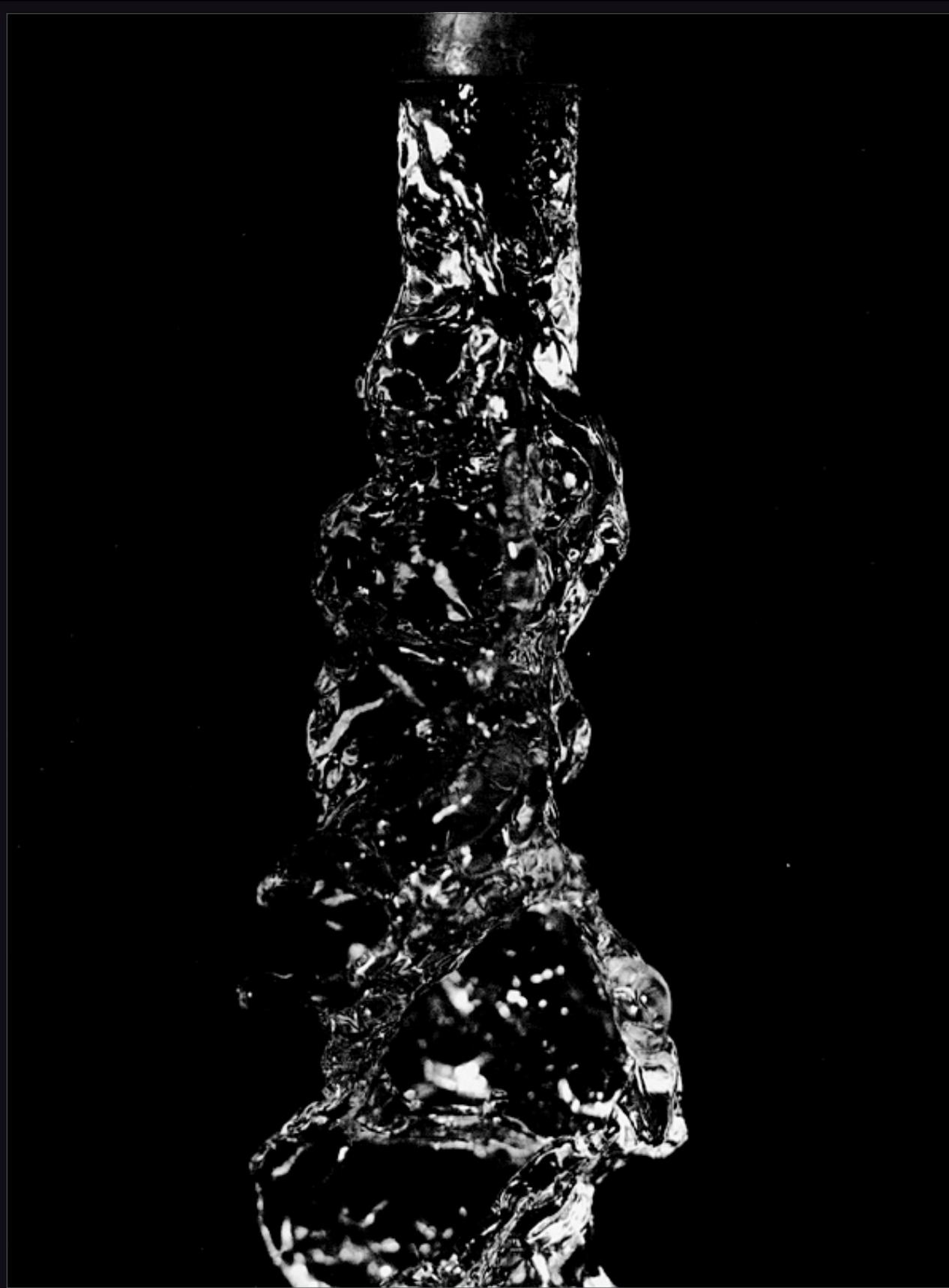
Harold ("Doc") Edgerton, Bullet and Apple (1964)

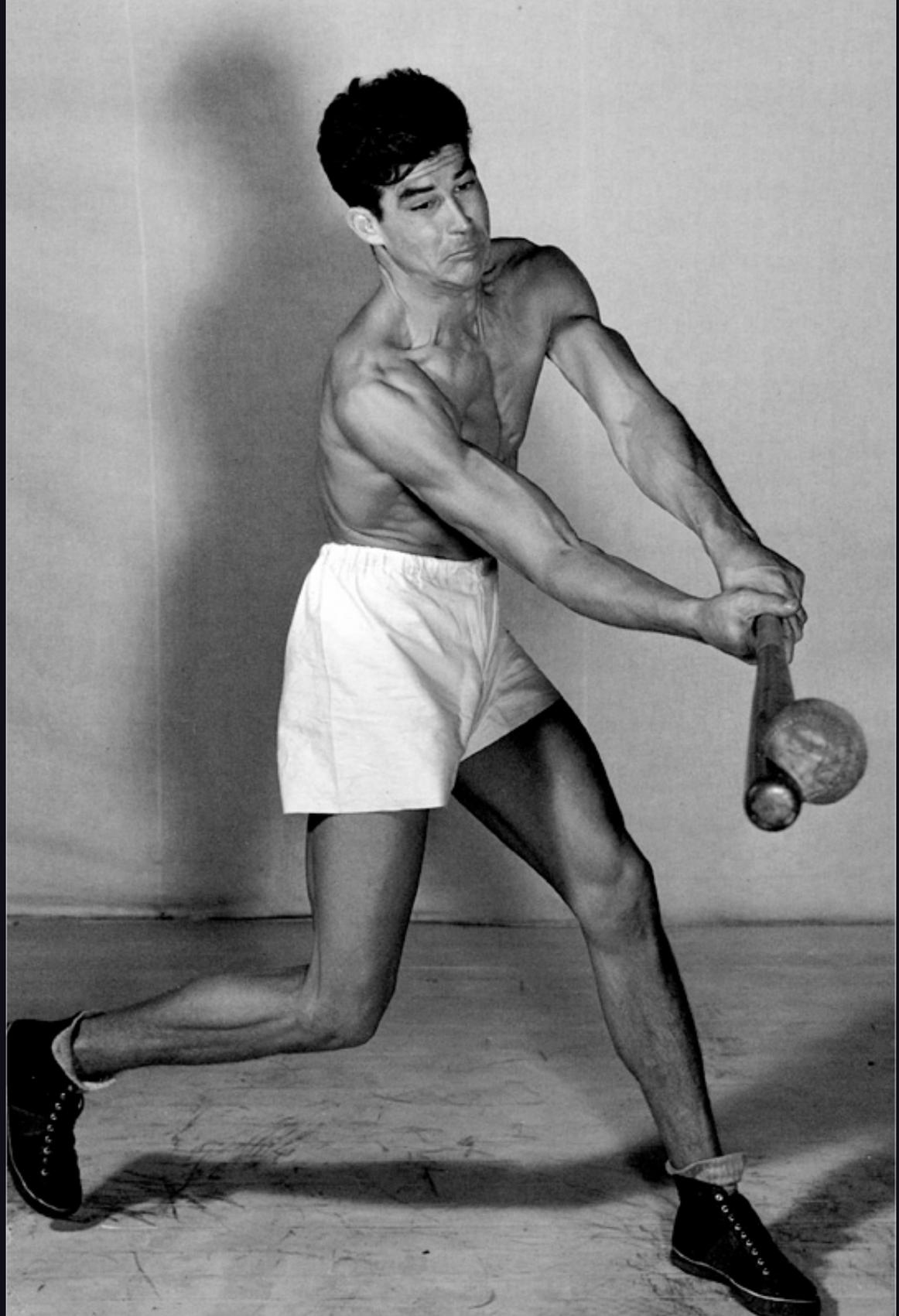


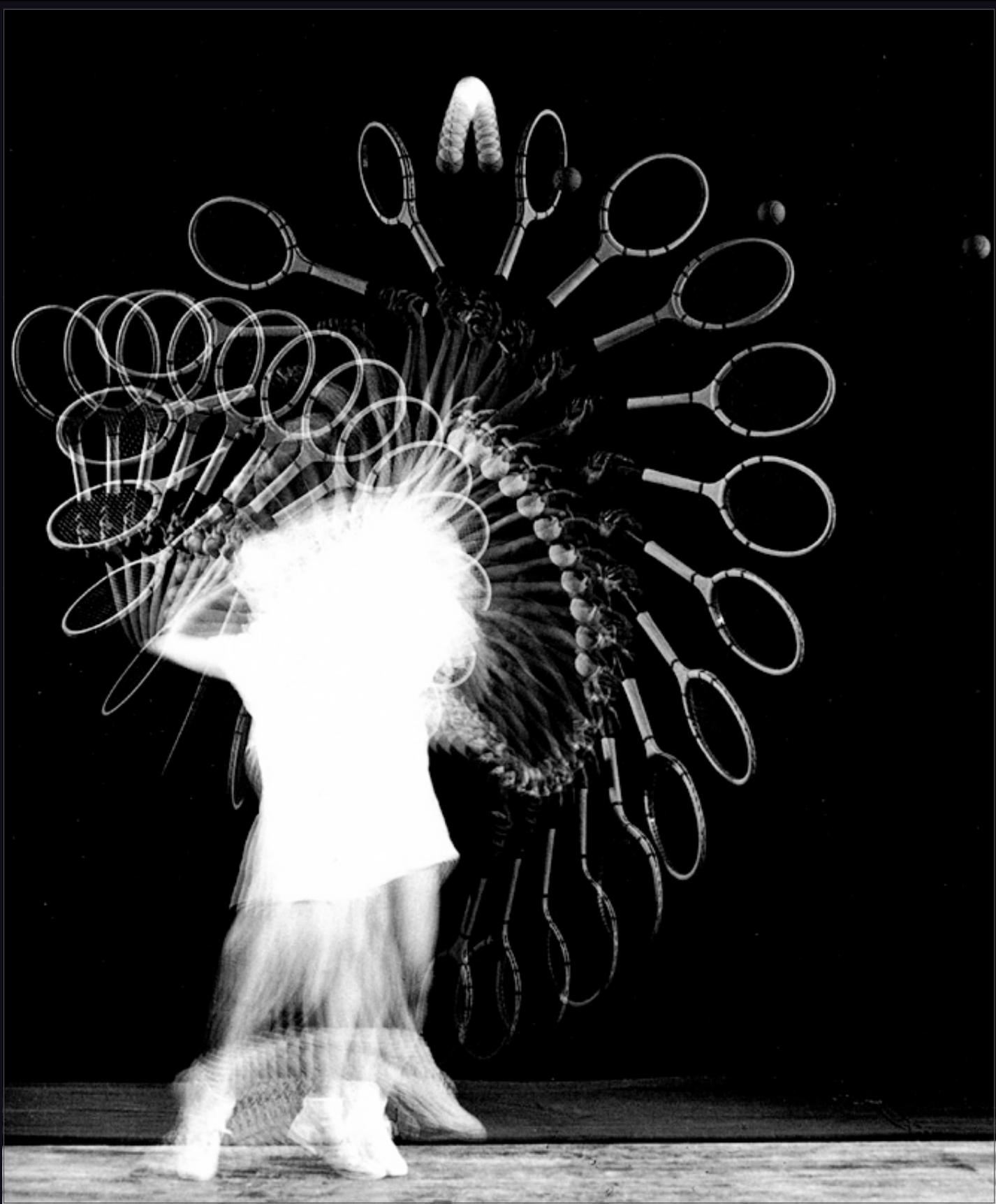


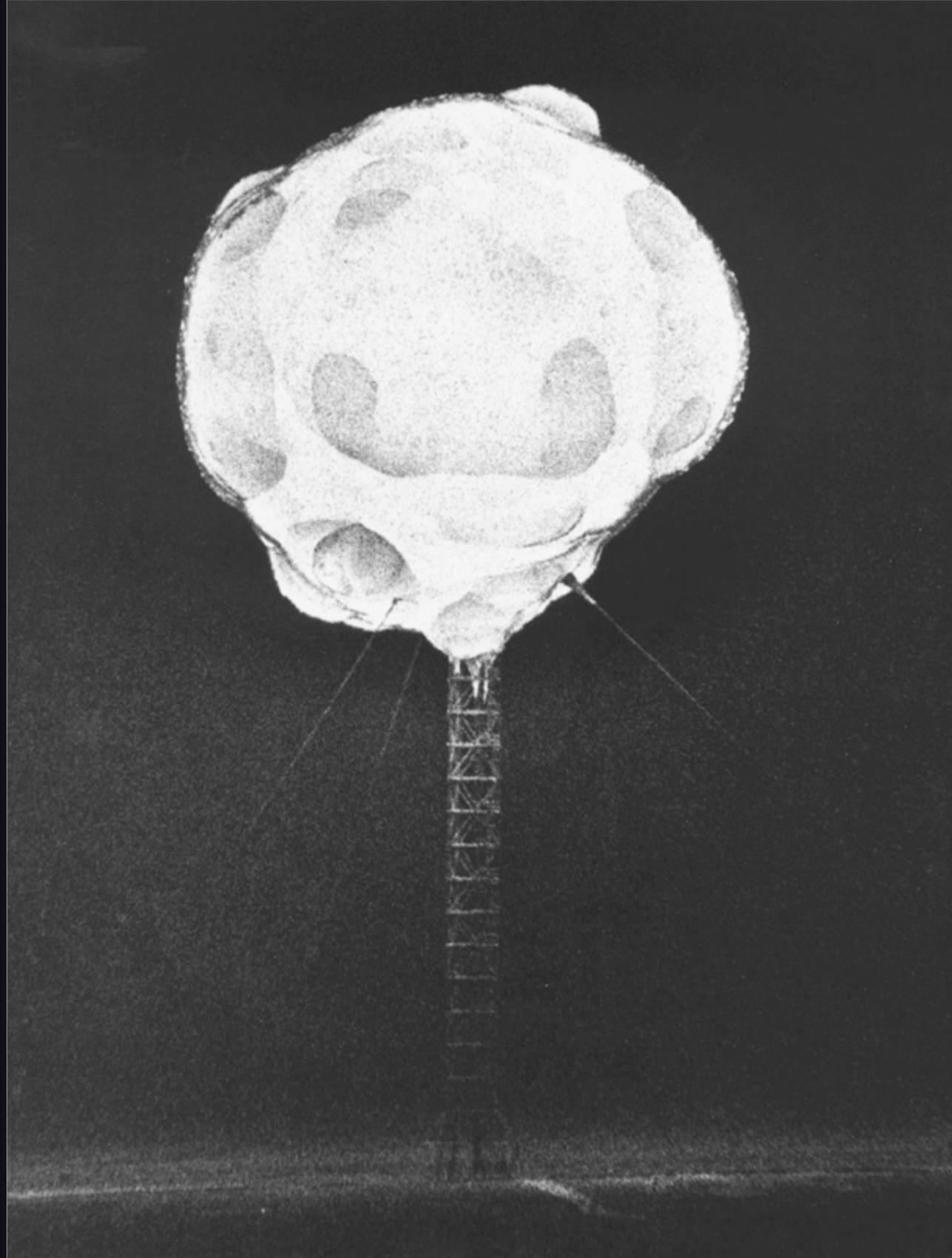
Harold ("Doc") Edgerton, Bullet and Apple (1964)

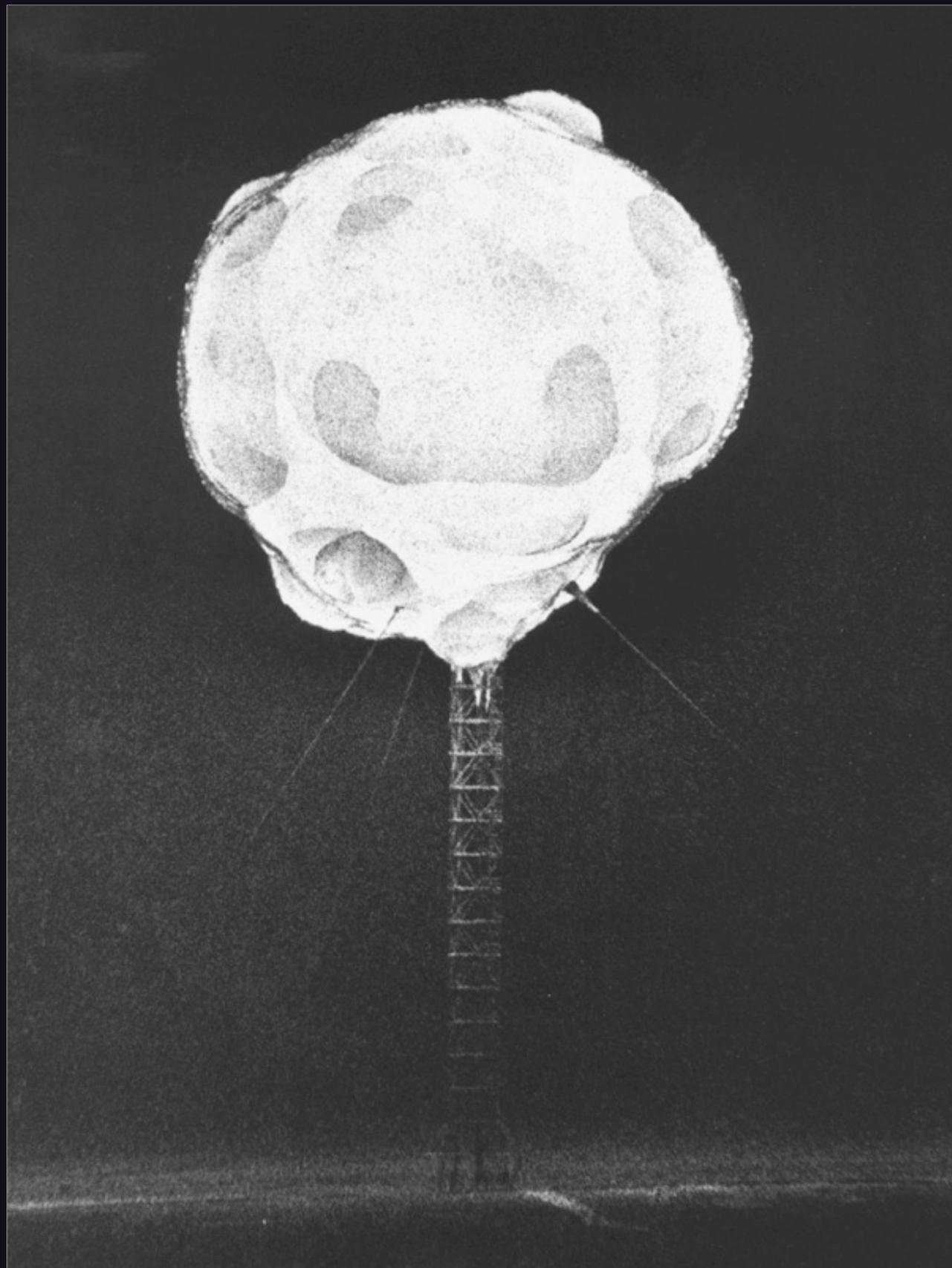






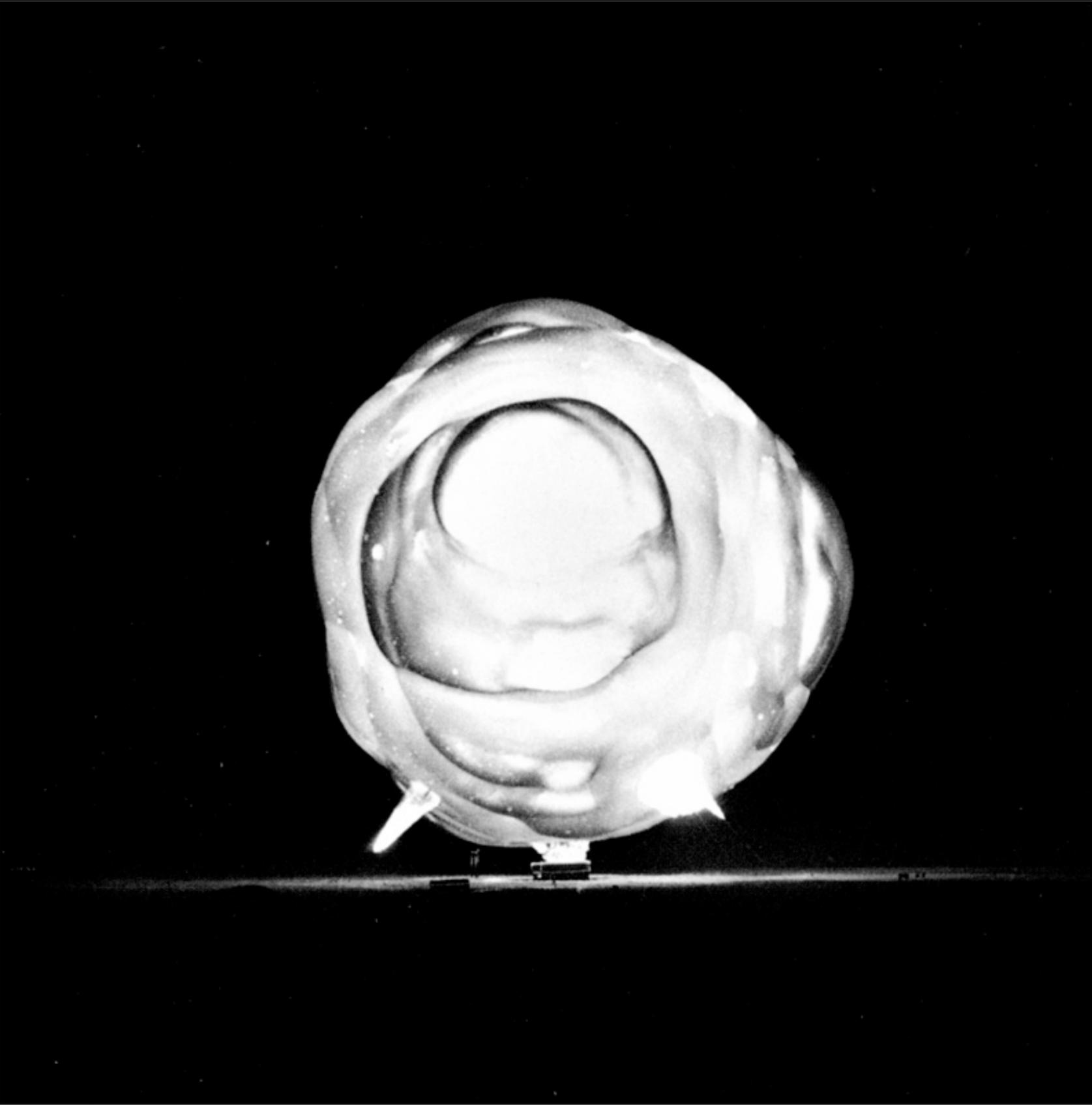


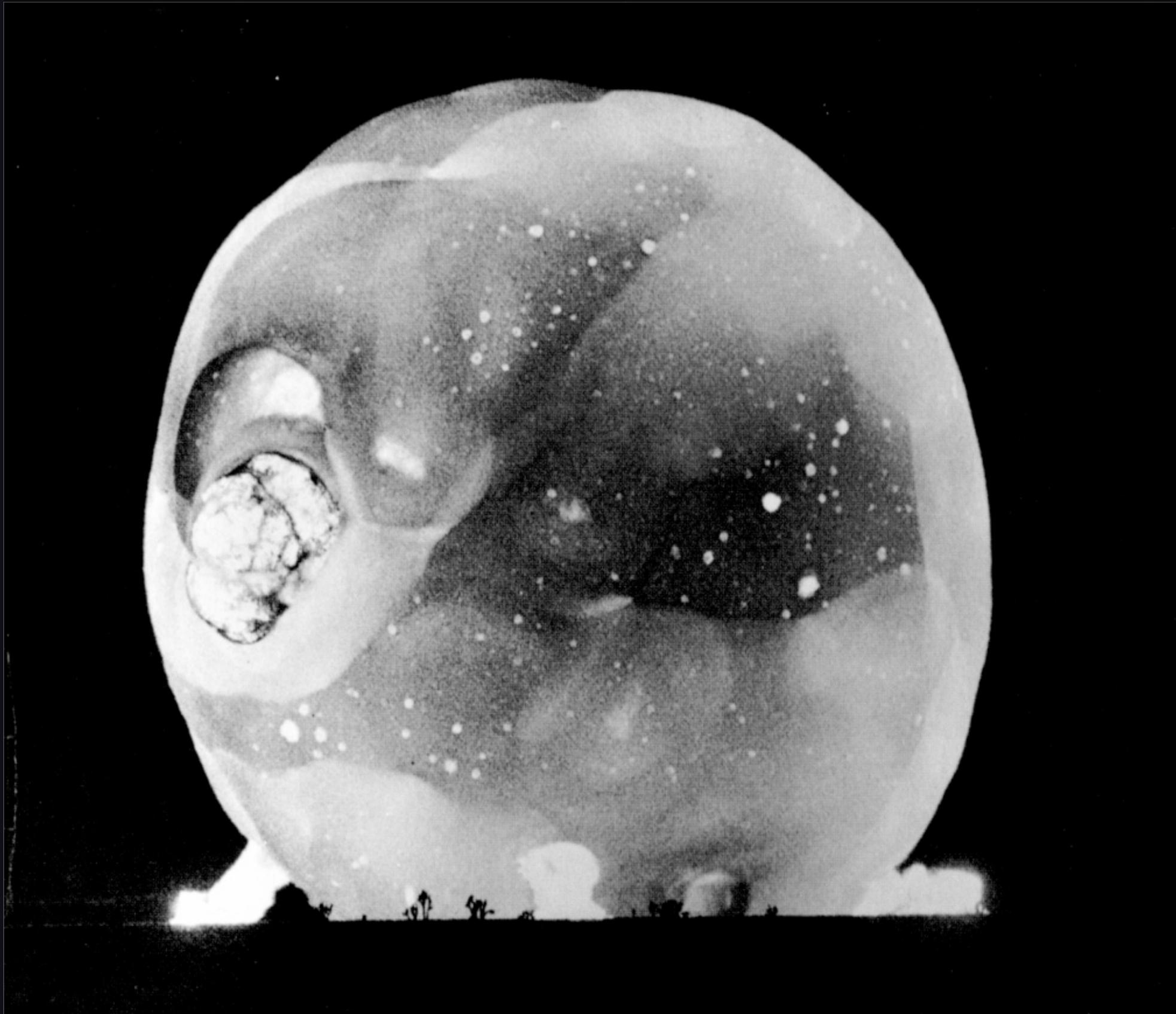


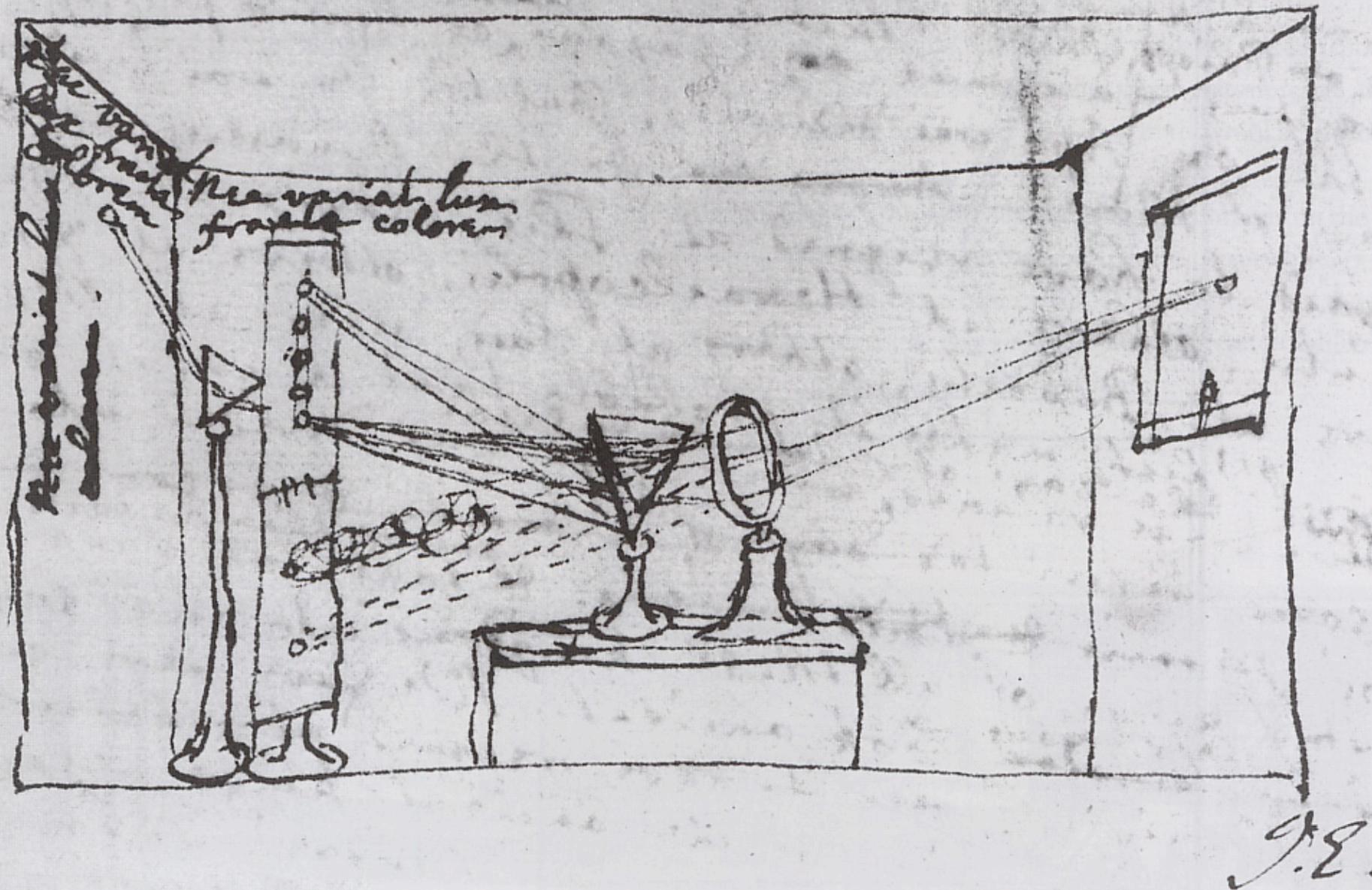


- atomic explosion
- $1/100,000,000$  second
- camera was 7 miles away
- telescopic lens

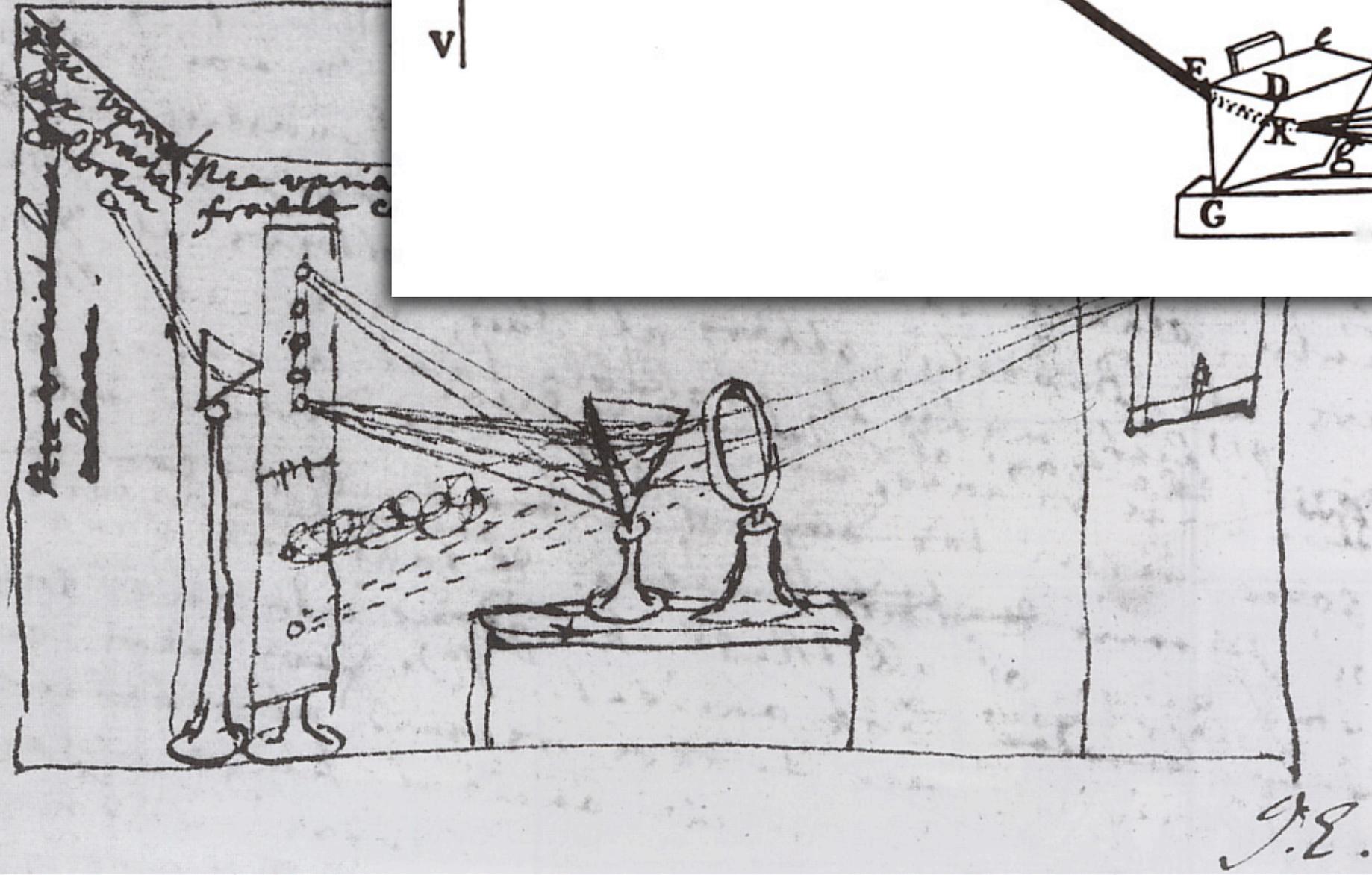
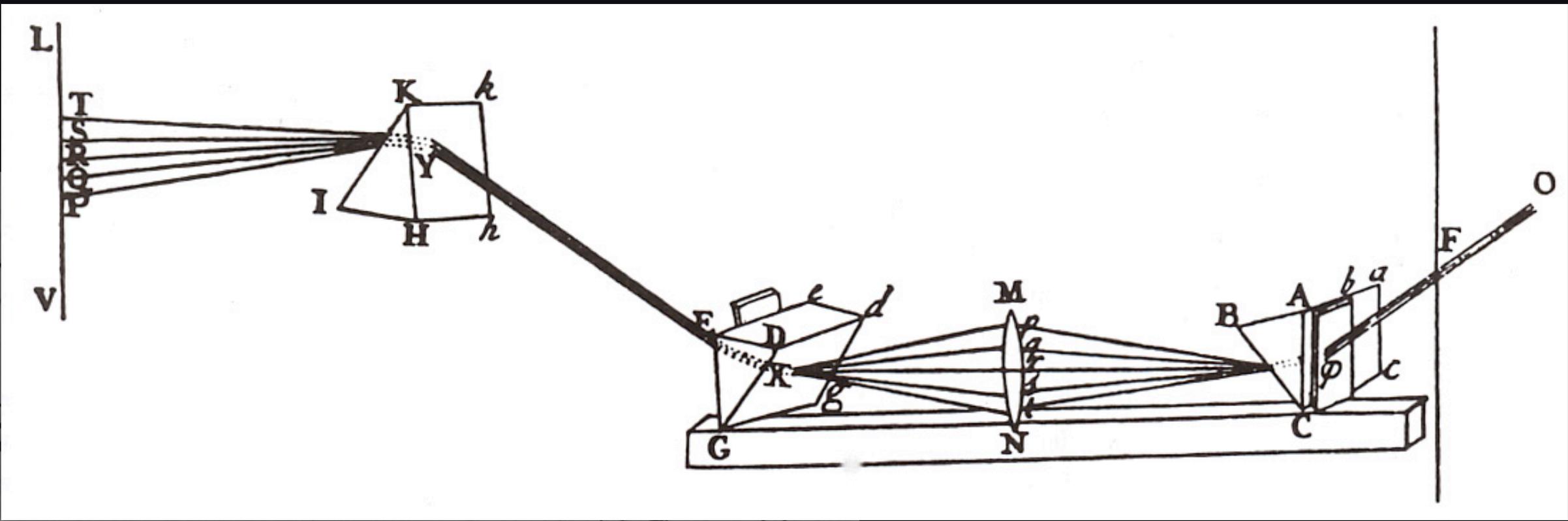






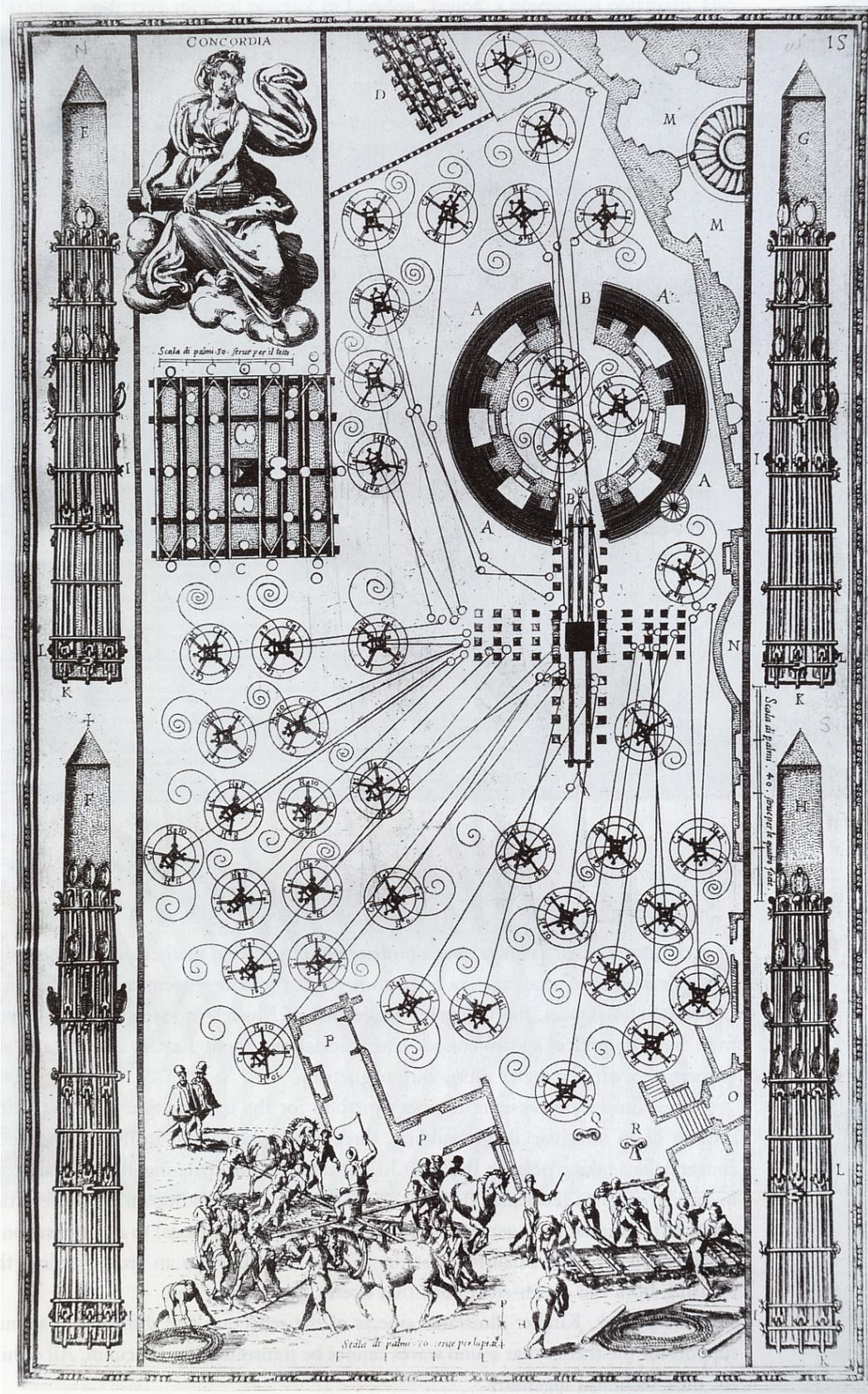


Issac Newton, Experimentum Crucis (1665)

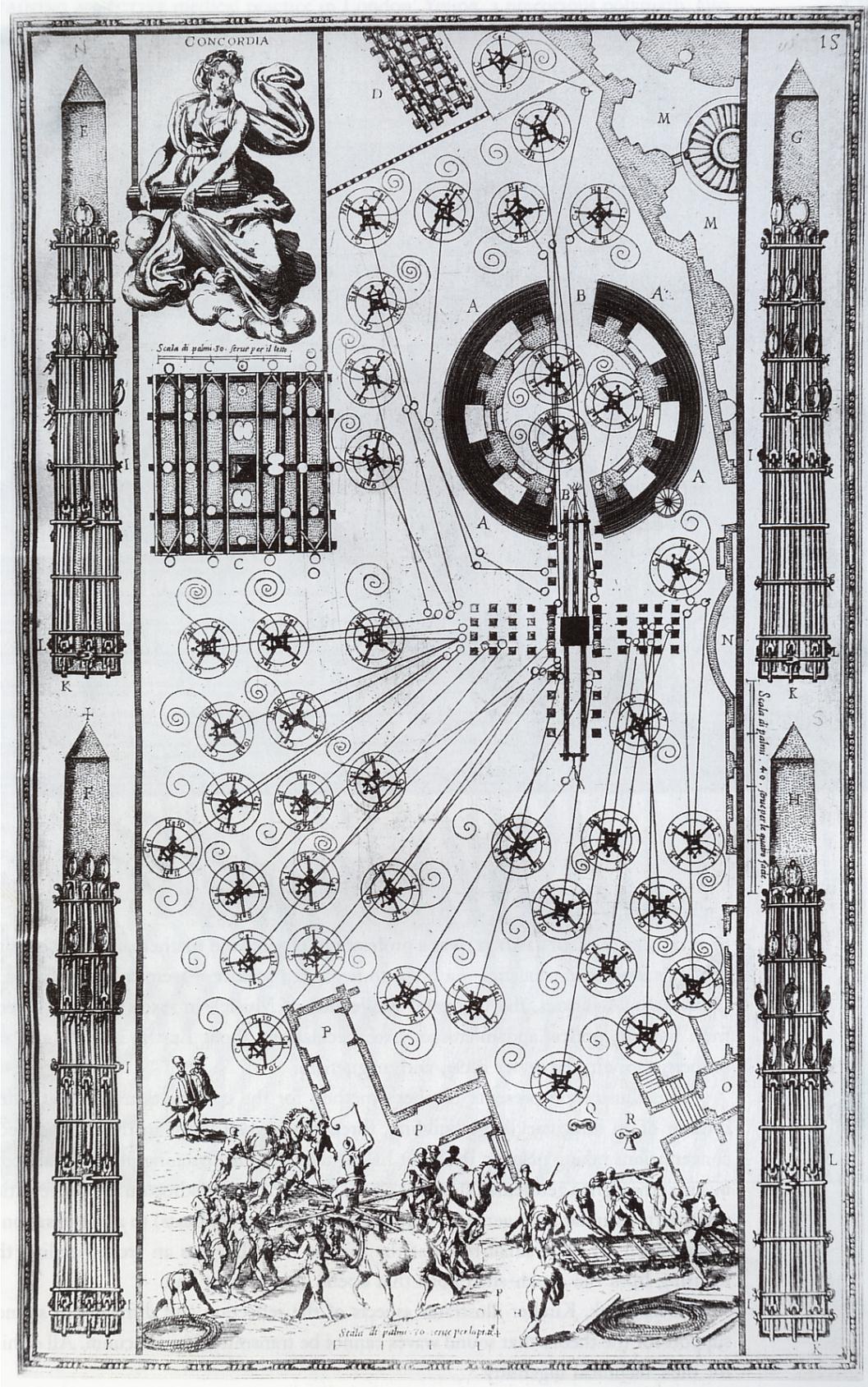


Issac Newton, Experimentum Crucis (1665)

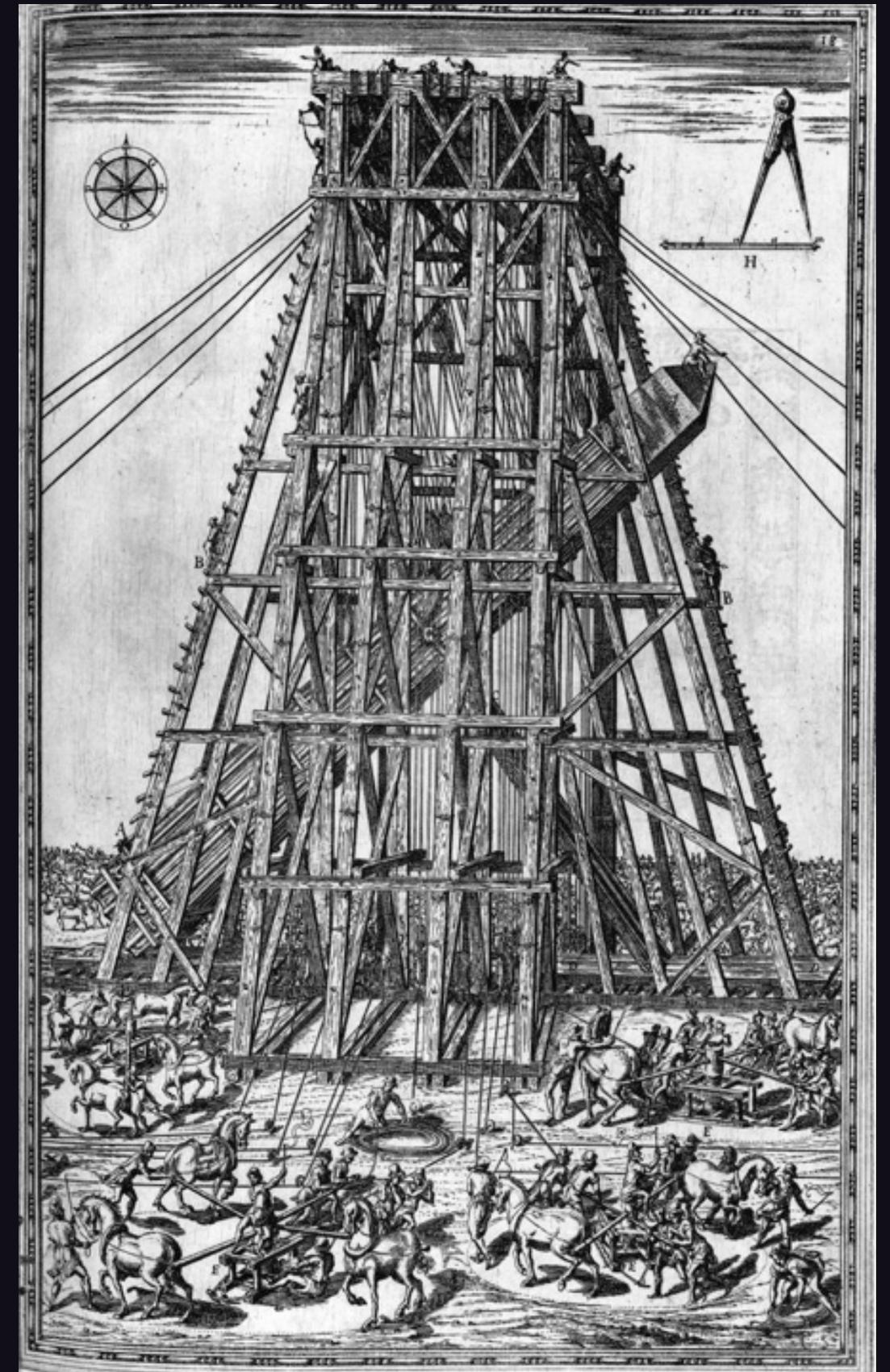
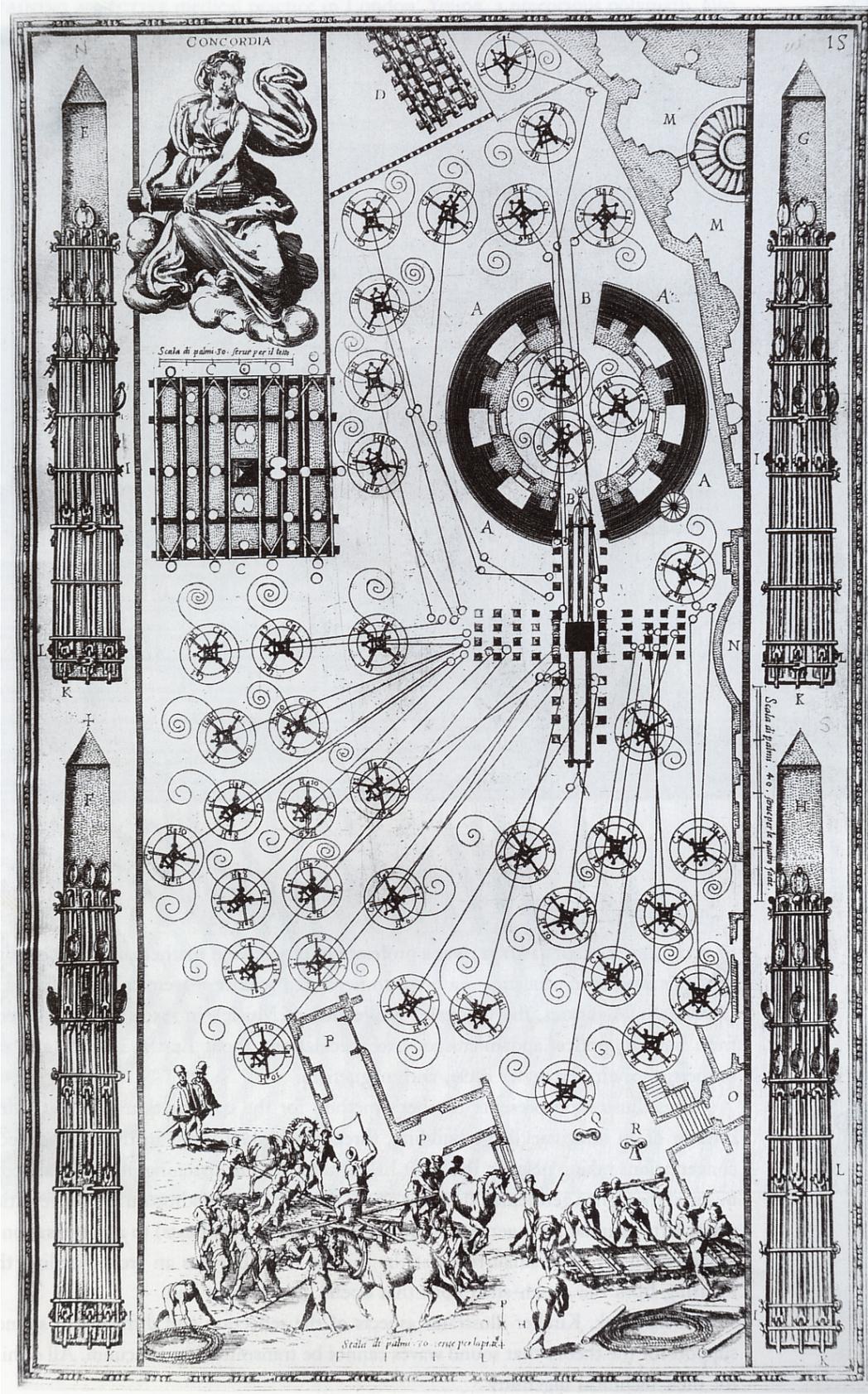
# Domenico Fontana Moving the Obelisk (1586)



# Domenico Fontana Moving the Obelisk (1586)

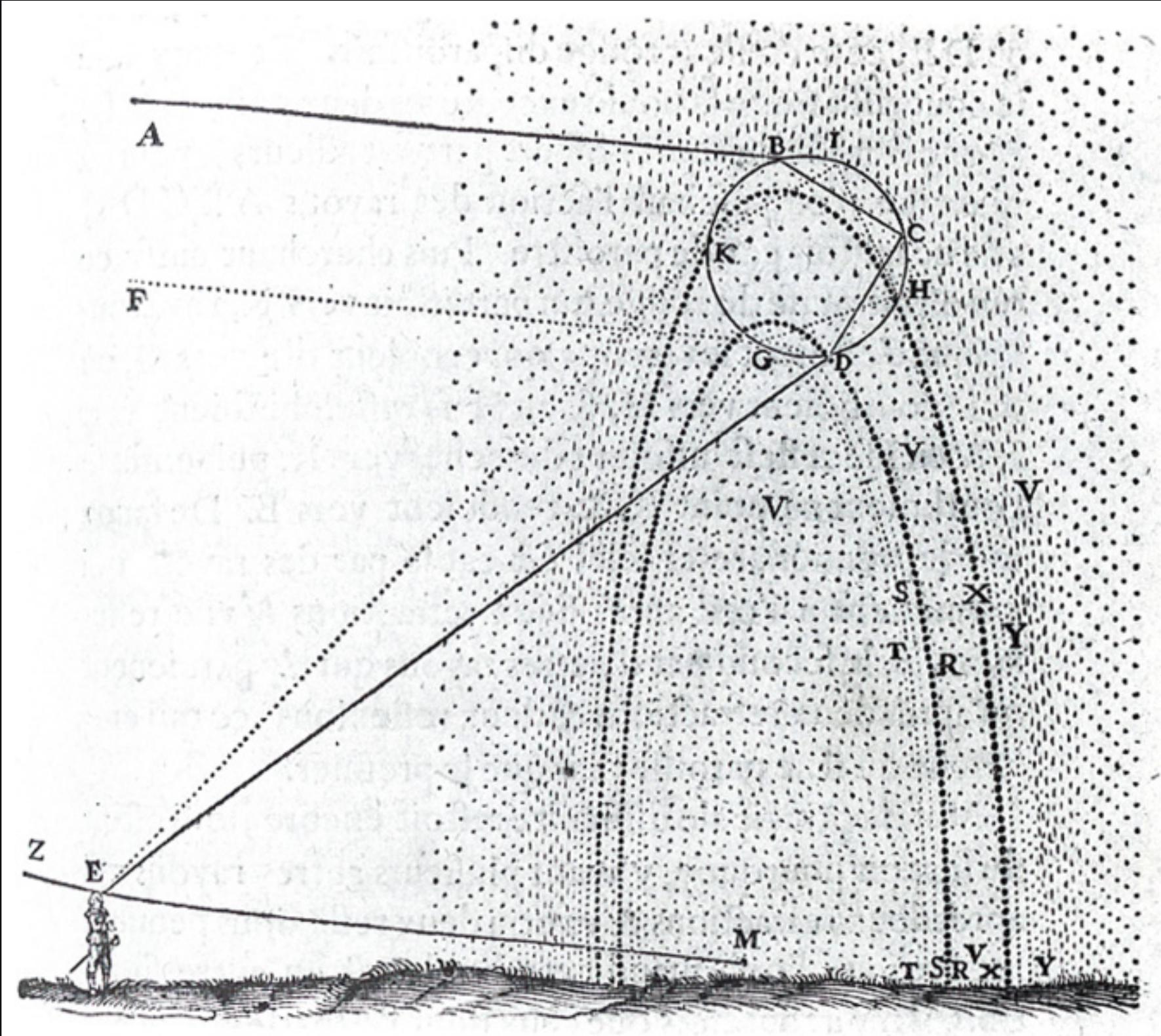


# Domenico Fontana Moving the Obelisk (1586)

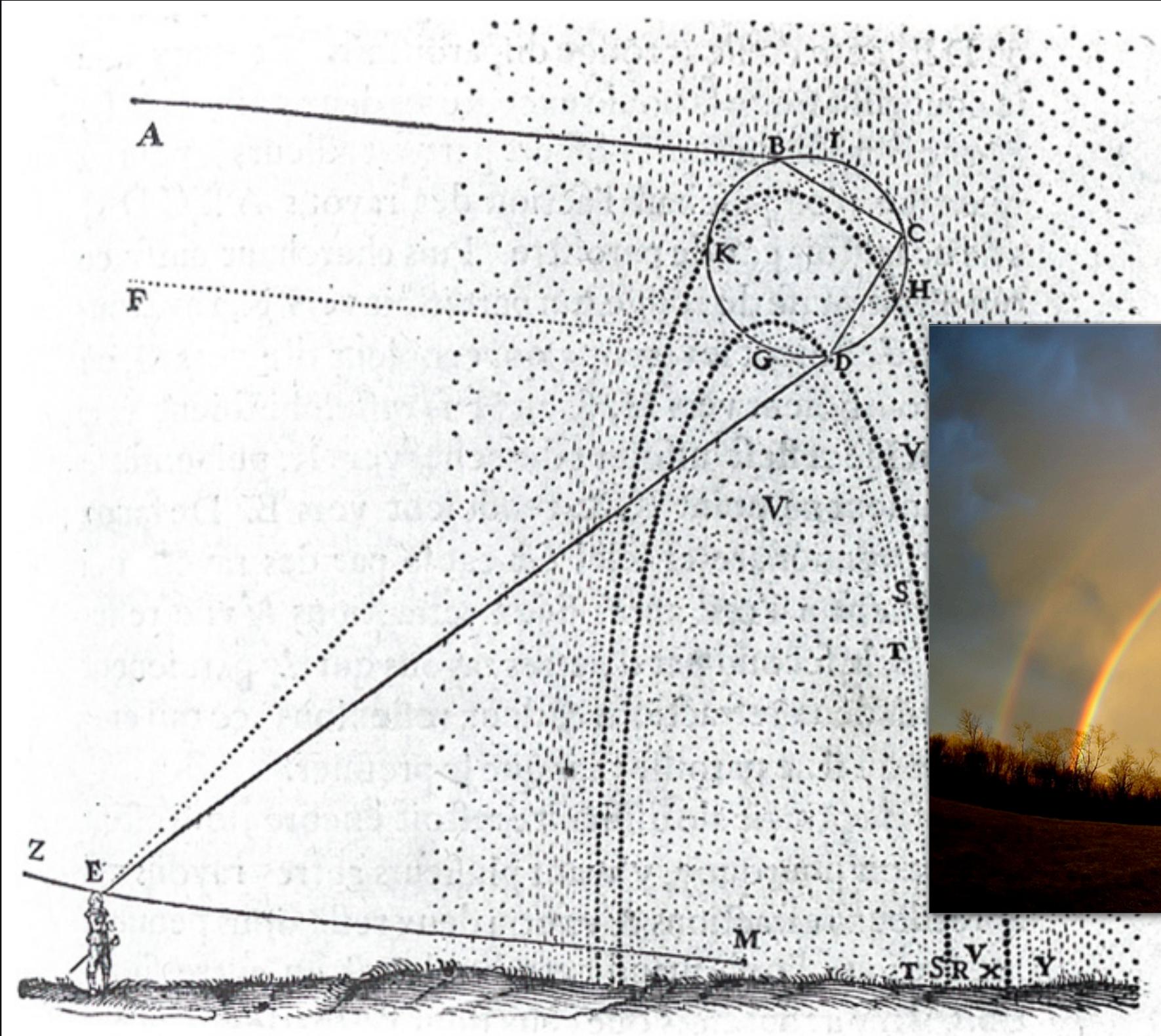




Otto Von Guericke, The Magdeburg Spheres (1654)



Rene Descartes, Formation of a Rainbow (1637)

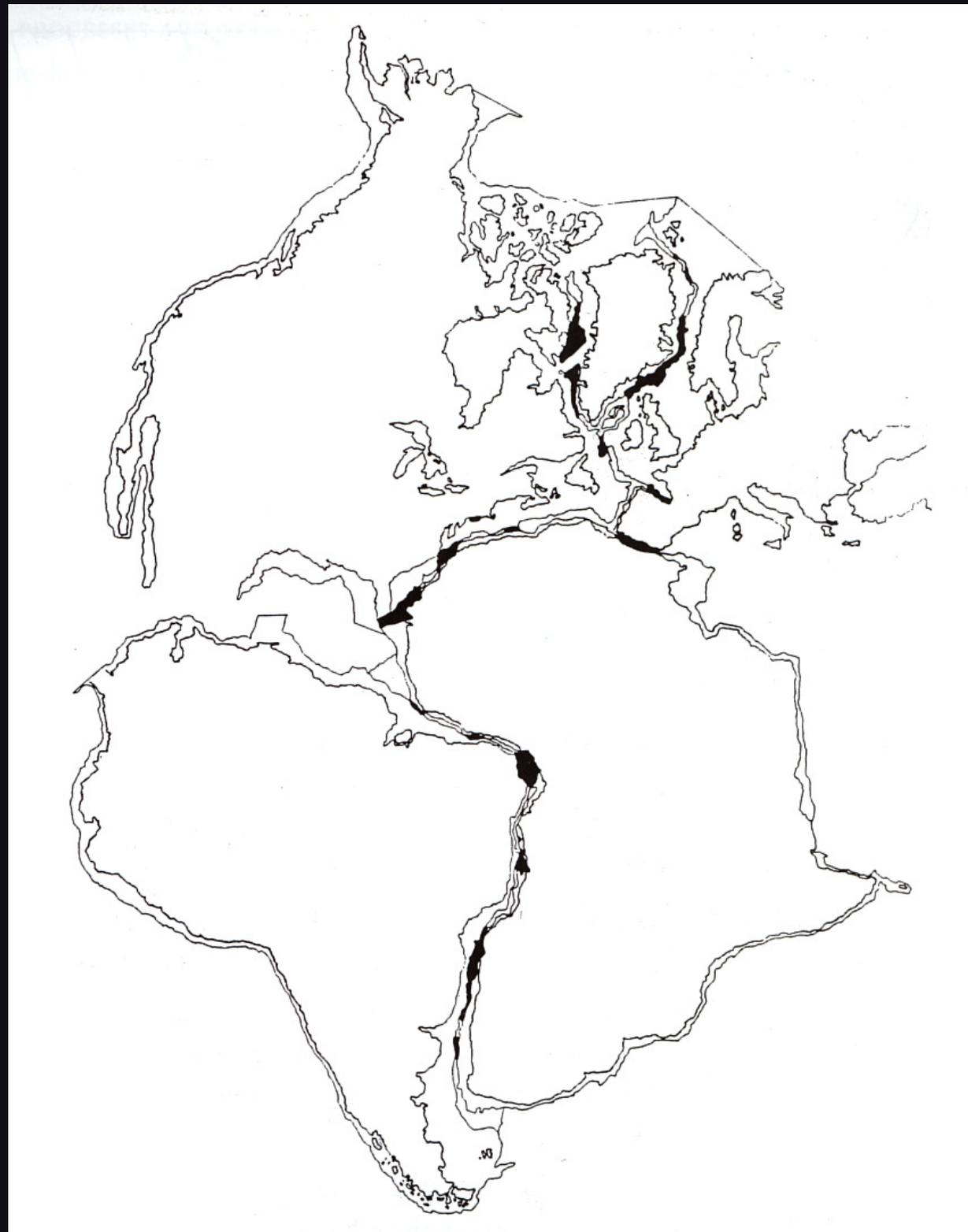


(Dan Bush)



René Descartes, Formation of a Rainbow (1637)





Alfred Wegener's Origin of Continents and Oceans (1915)

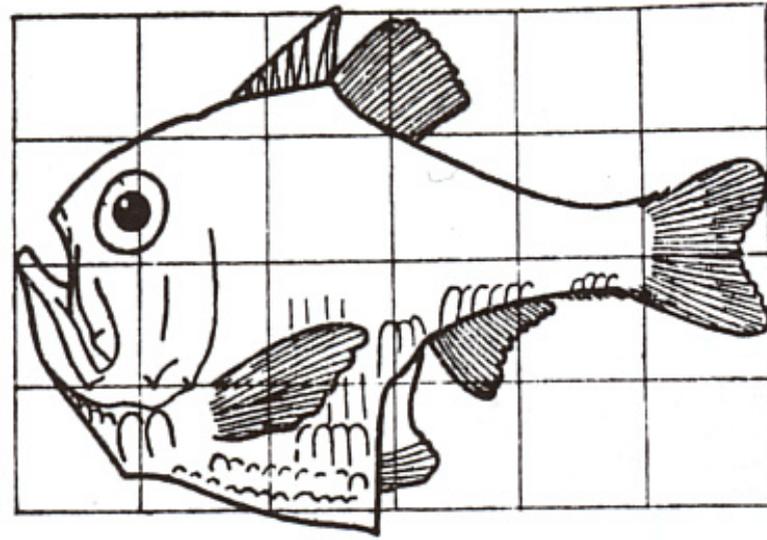


Fig. 146. *Argyropelecus olfersi*.

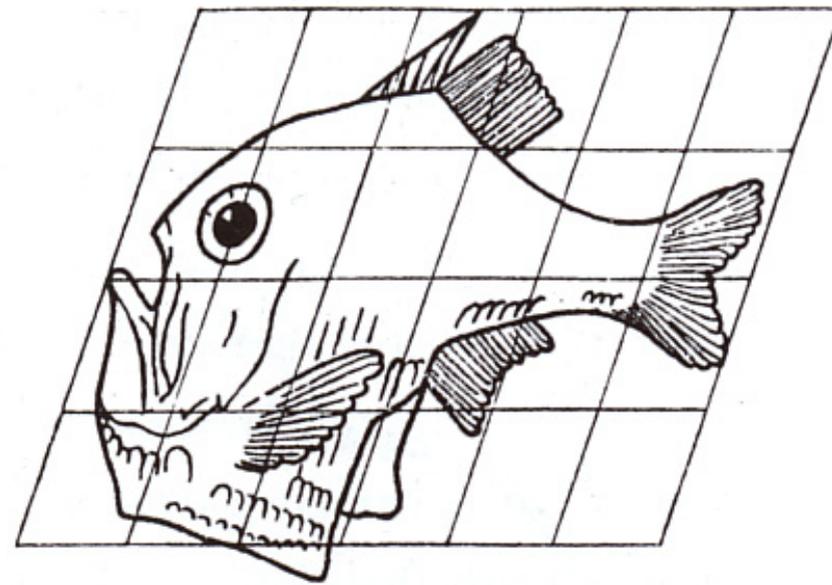


Fig. 147. *Sternoptyx diaphana*.

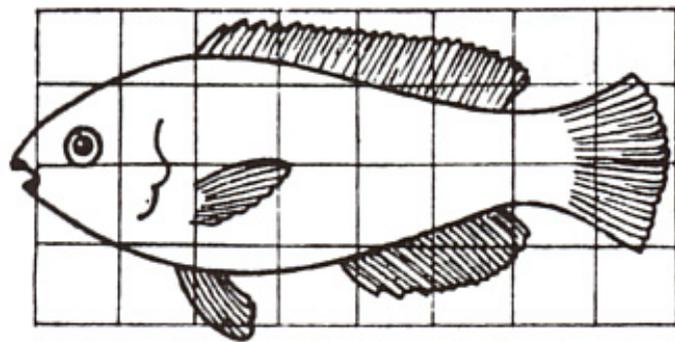


Fig. 148. *Scarus* sp.

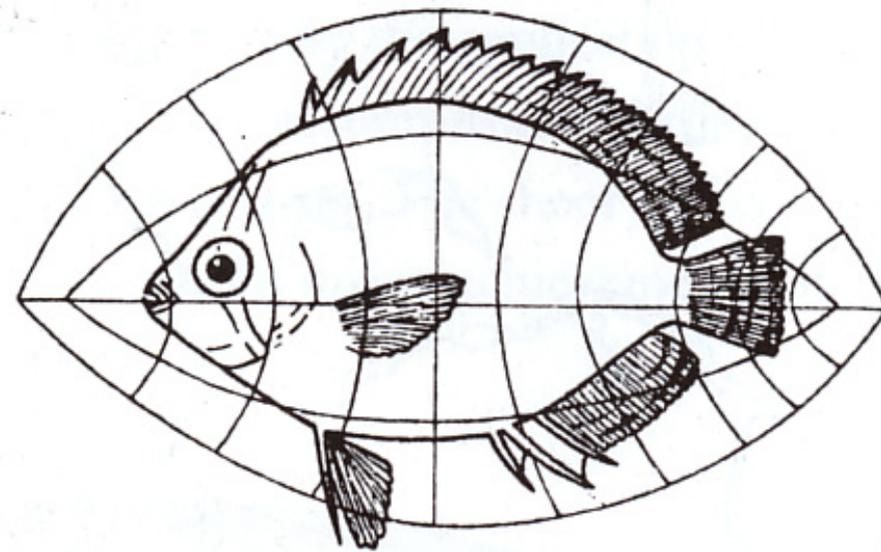


Fig. 149. *Pomacanthus*.

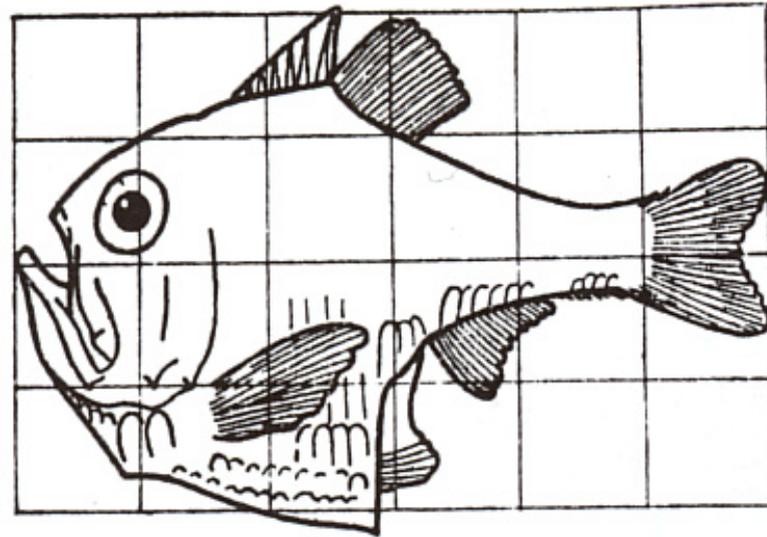


Fig. 146. *Argyropelecus olfersi*.

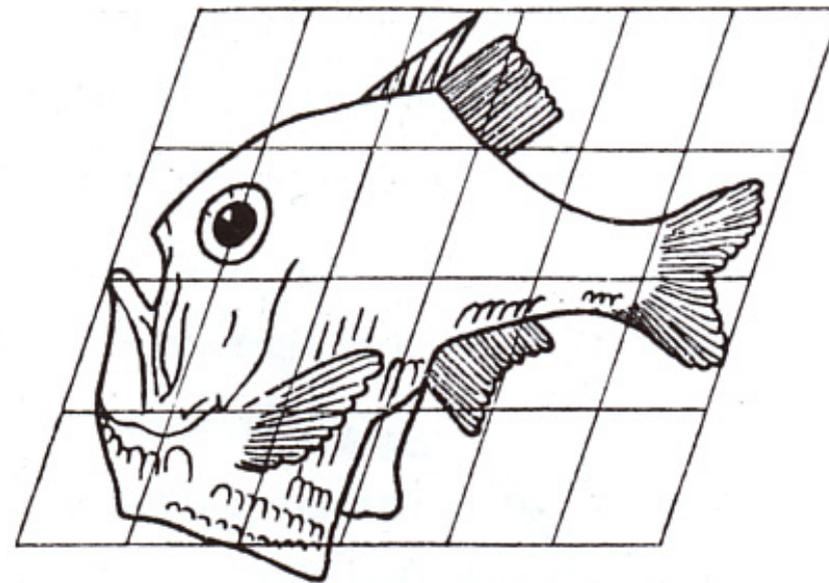


Fig. 147. *Sternoptyx diaphana*.

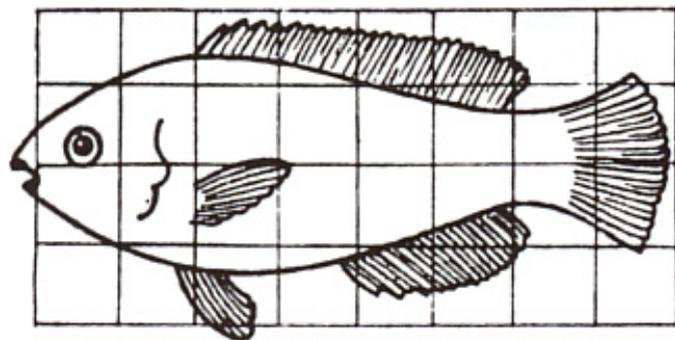


Fig. 148. *Scarus* sp.

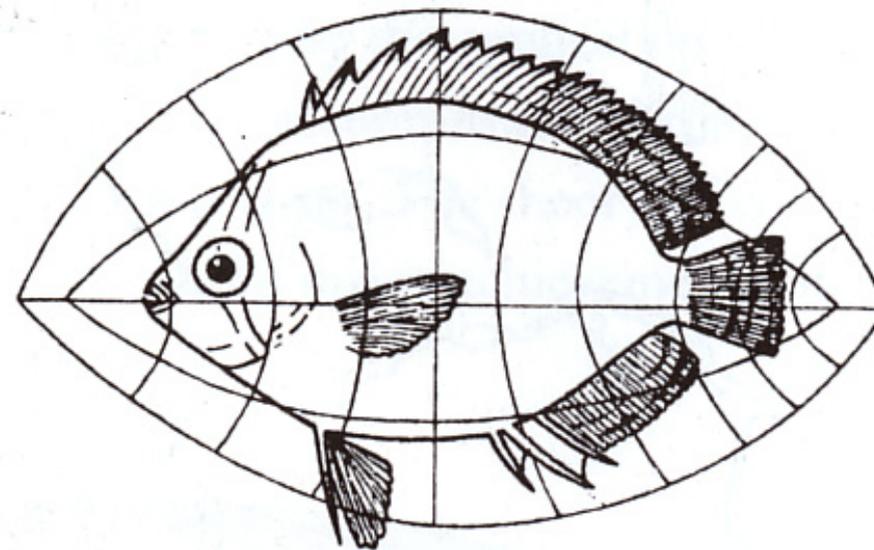
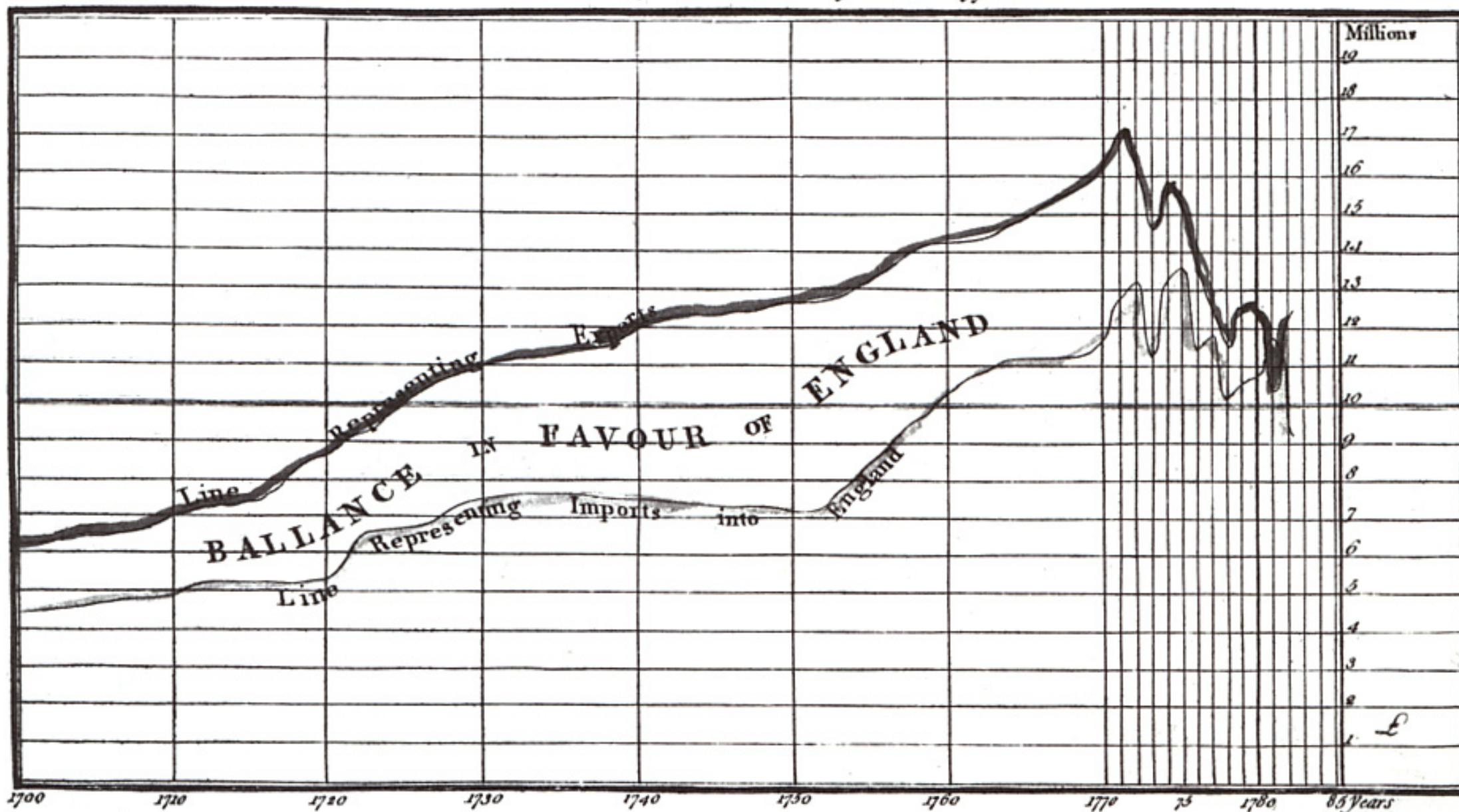


Fig. 149. *Pomacanthus*.

*CHART of all the IMPORTS and EXPORTS to and from ENGLAND  
From the Year 1700 to 1782 by W. Playfair*

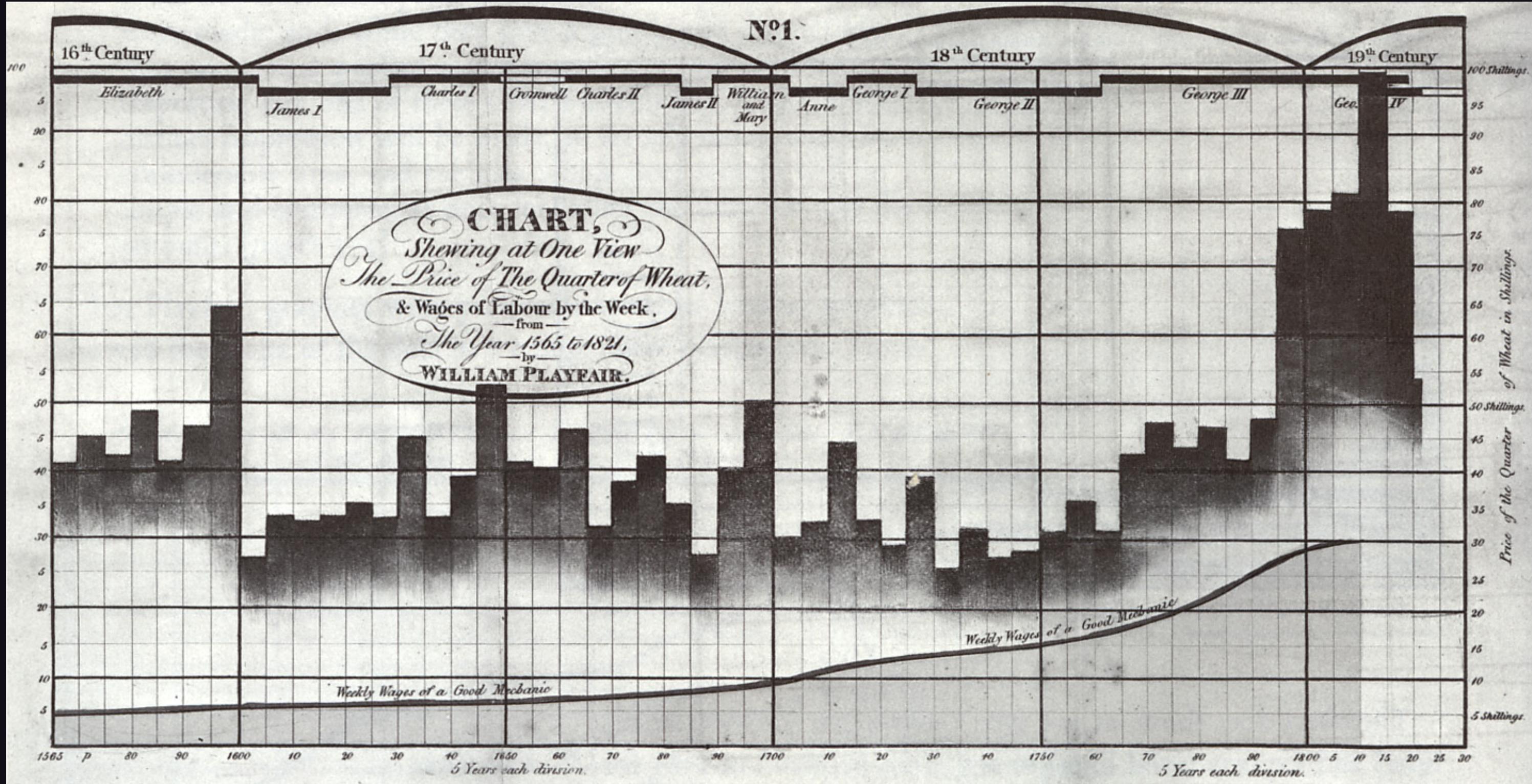


*The Divisions at the Bottom, express YEARS, & those on the Right hand, MILLIONS of POUNDS*

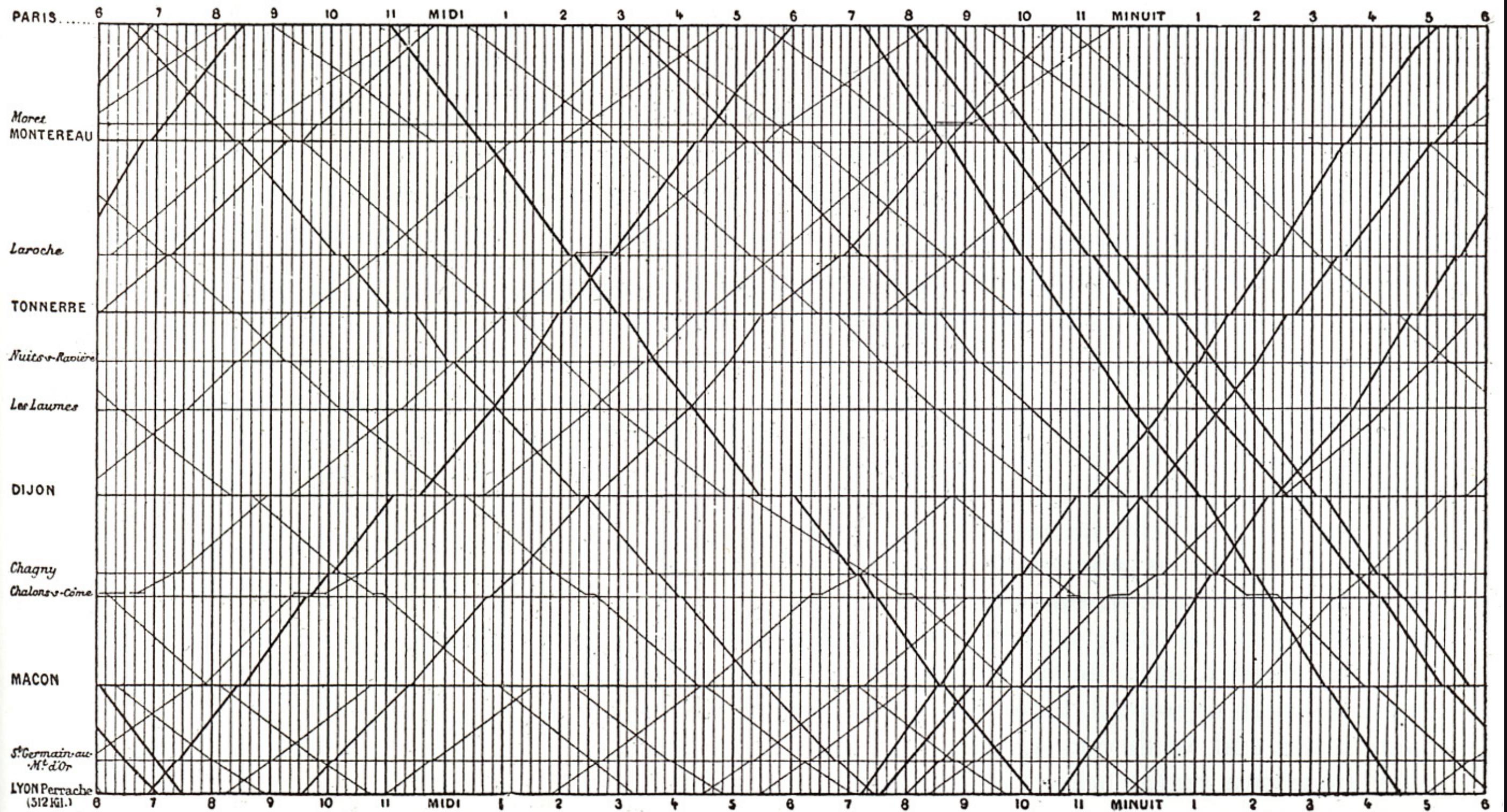
*J. Finlay Sculp.*

*Published as the Act directs, 20.<sup>th</sup> Aug.<sup>r</sup> 1785*

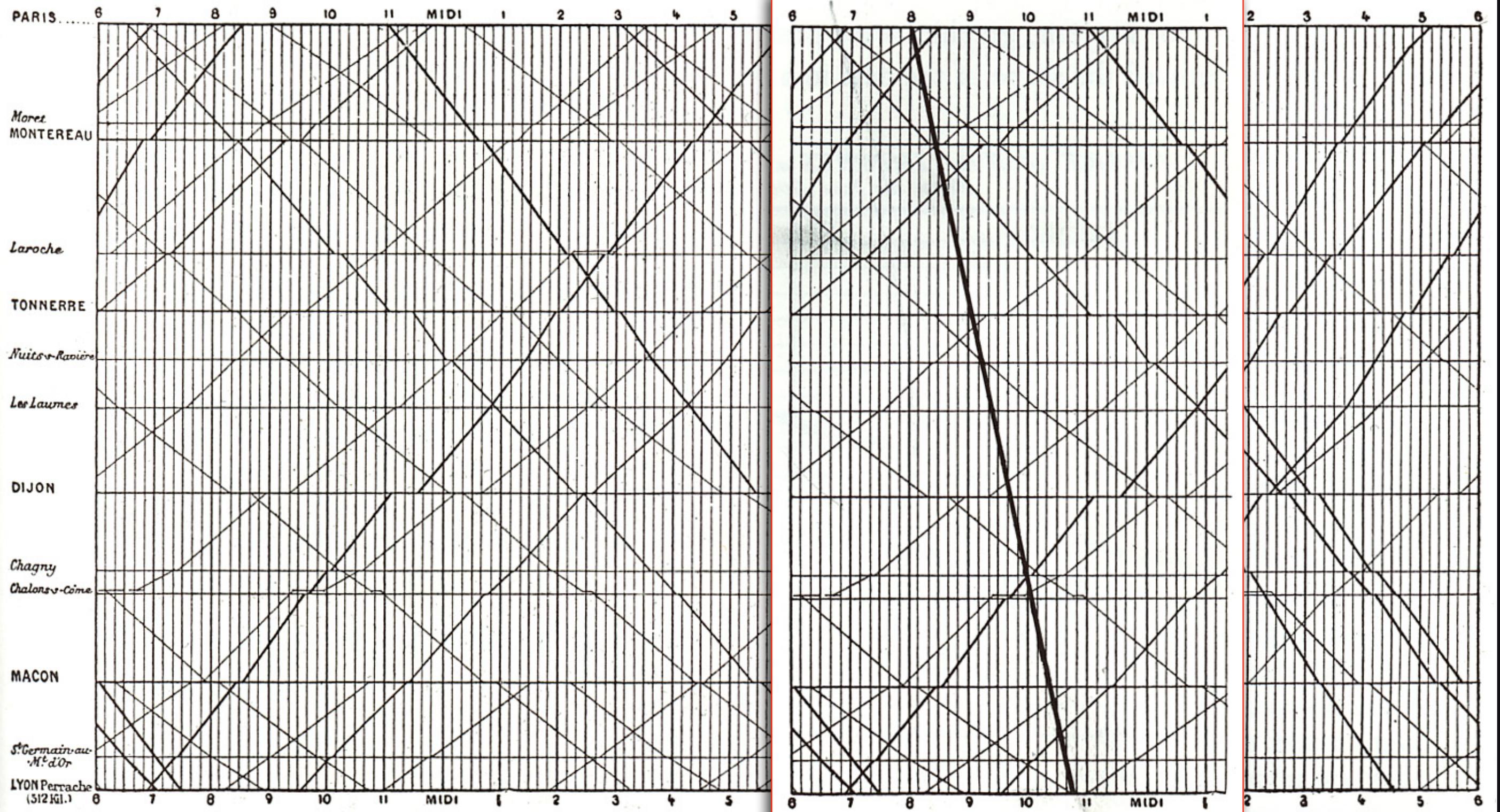
William Playfair, analysis of imports and exports to/from England (1782)



William Playfair, price of wheat versus wages of labor (1782)



Etienne-Jules Marey, graphical train schedule from Paris to Lyon (1885)



Etienne-Jules Marey, graphical train schedule from Paris to Lyon (1885)



# Carte Figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812-1813.

Dressée par M. Minard, Inspecteur Général des Ponts et Chaussées en retraite. Paris, le 20 Novembre 1869.

Les nombres d'hommes présents sont représentés par les largeurs des zones colorées à raison d'un millimètre pour dix mille hommes; ils sont de plus écrits en travers des zones. Le rouge désigne les hommes qui entrent en Russie, le noir ceux qui en sortent. — Les renseignements qui ont servi à dresser la carte ont été puisés dans les ouvrages de M. M. Chiers, de Ségur, de Fezensac, de Chambray et le journal inédit de Jacob, pharmacien de l'Armée depuis le 28 Octobre. Pour mieux faire juger à l'œil la diminution de l'armée, j'ai supposé que les corps du Prince Jérôme et du Maréchal Davout qui avaient été détachés sur Minsk et Mohilow et ont rejoint vers Orscha et Witebsk, avaient toujours marché avec l'armée.

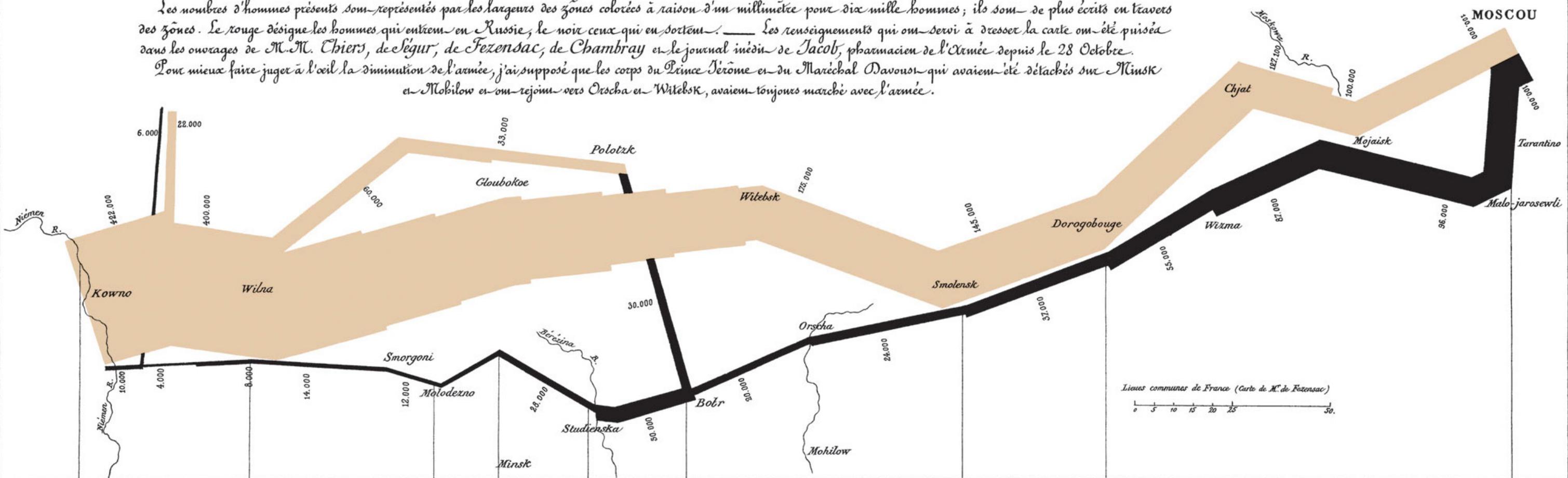
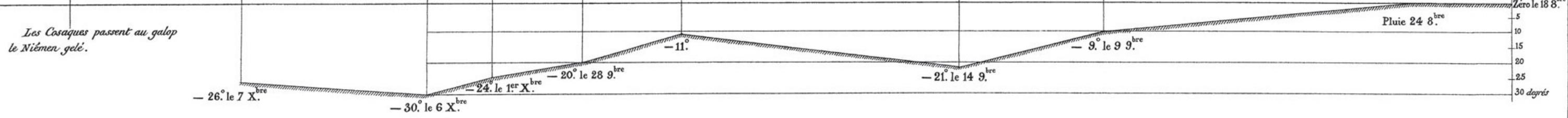


TABLEAU GRAPHIQUE de la température en degrés du thermomètre de Réaumur au dessous de zéro.



Les Cosaques passent au galop le Niémen gelé.

Autog. par Regnier, 8. Pas. S<sup>te</sup> Marie S<sup>t</sup> G<sup>ermain</sup> à Paris.

Imp. Lith. Regnier et Dourdet.

## Charles Minard, Napoleon's Russian Campaign (1885)