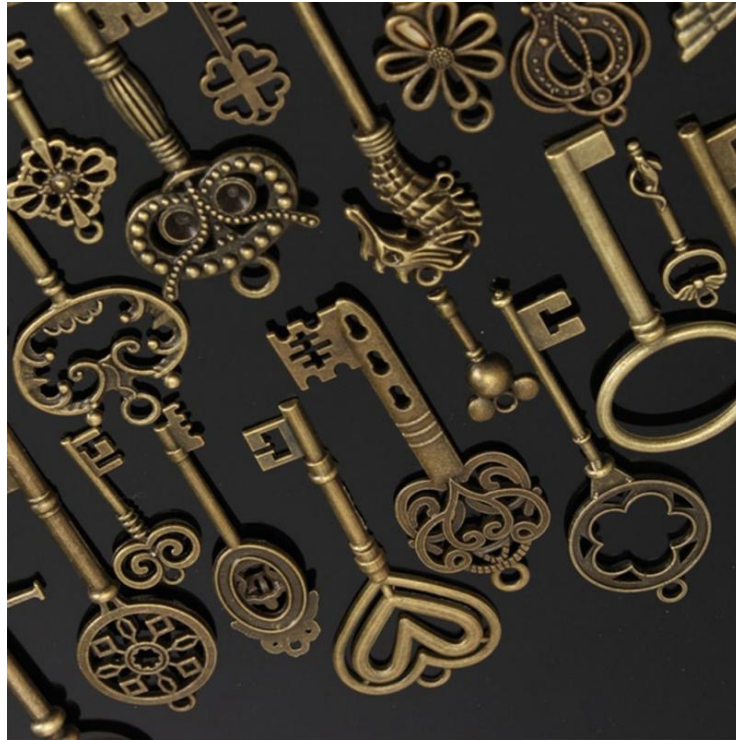


# **una mostra di storia della scienza**



**chiavi narrative  
marzo 2024**

**un possibile compito**

**una mostra in occasione del  
centesimo anniversario della teoria  
atomica di Niels Bohr (1913)**

**quale chiave narrativa, *fil rouge*,  
sviluppare?**

## *fil rouge 1*

**l'evento in sé e il protagonista**

**la grande scoperta di un giovane scienziato**

**❖ focalizzazione sul “presente”**

***titolo***

**ritratto dello scienziato come giovane uomo**

THE  
LONDON, EDINBURGH, AND DUBLIN  
PHILOSOPHICAL MAGAZINE  
AND  
JOURNAL OF SCIENCE.

[SIXTH SERIES.]

JULY 1913.

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By N. BOHR, Dr. phil. Copenhagen\*.

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In an attempt to explain some of the properties of matter on the basis of this atom-model we meet, however, with difficulties of a serious nature arising from the apparent

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***On the Constitution of  
Atoms and Molecules***

# *fil rouge 1*

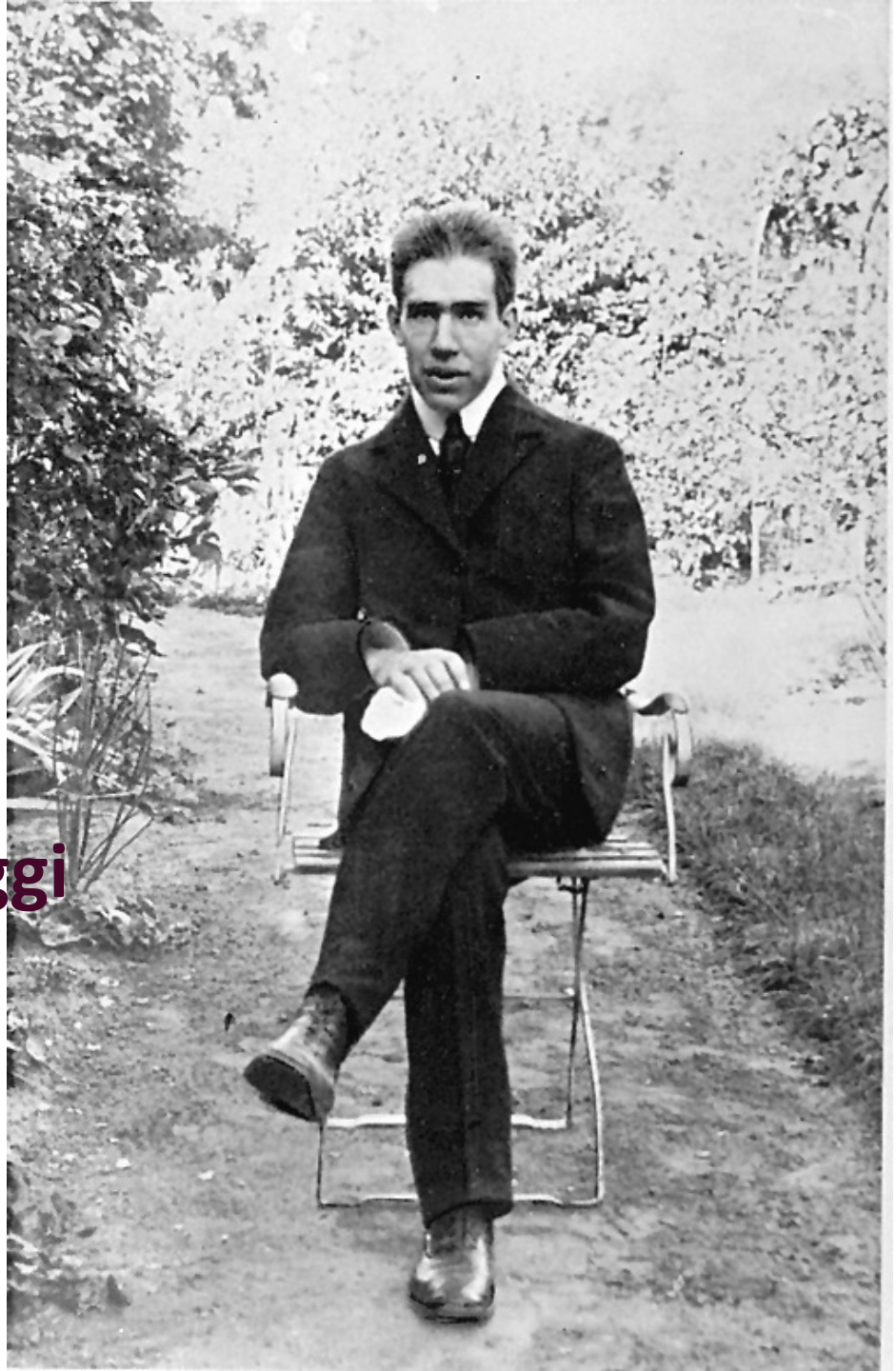
## argomenti

- le influenze culturali e i presupposti della teoria
- le reazioni della comunità scientifica del tempo
- la preparazione scientifica, umana, filosofica e culturale di Bohr
- gli ambienti formativi e i compagni di percorso
- ◆ Bohr figura emblematica del XX secolo

**materiali espositivi**

- **immagini dei personaggi**

**Niels Hendrik David Bohr  
1913**



- immagini degli ambienti



• documenti originali

Vol. 26. JULY 1913. No. 151.

*Published the First Day of every Month.*

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Double Number. Price Five Shillings.

Vol. 26. SEPTEMBER 1913. No. 152.

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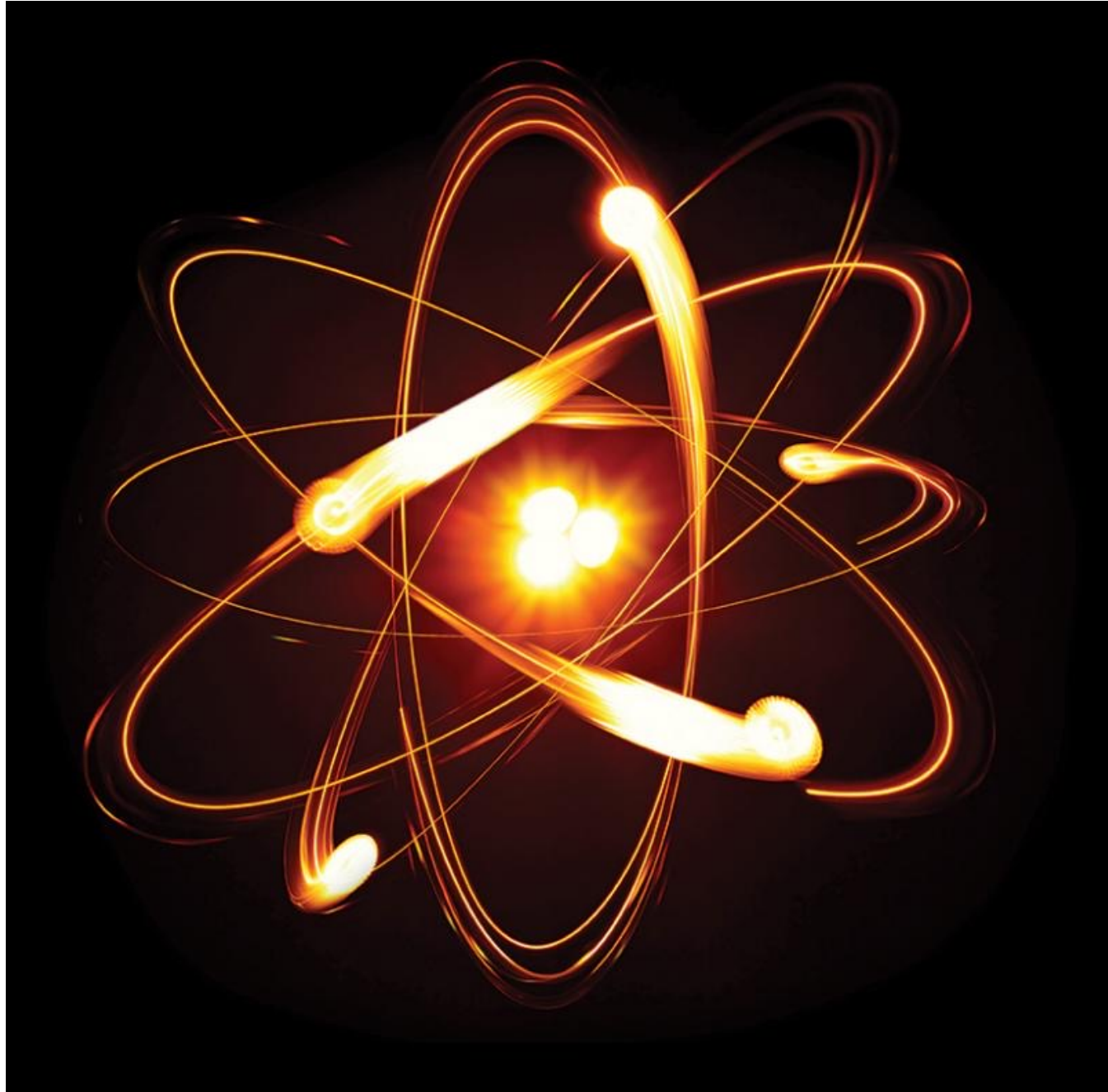
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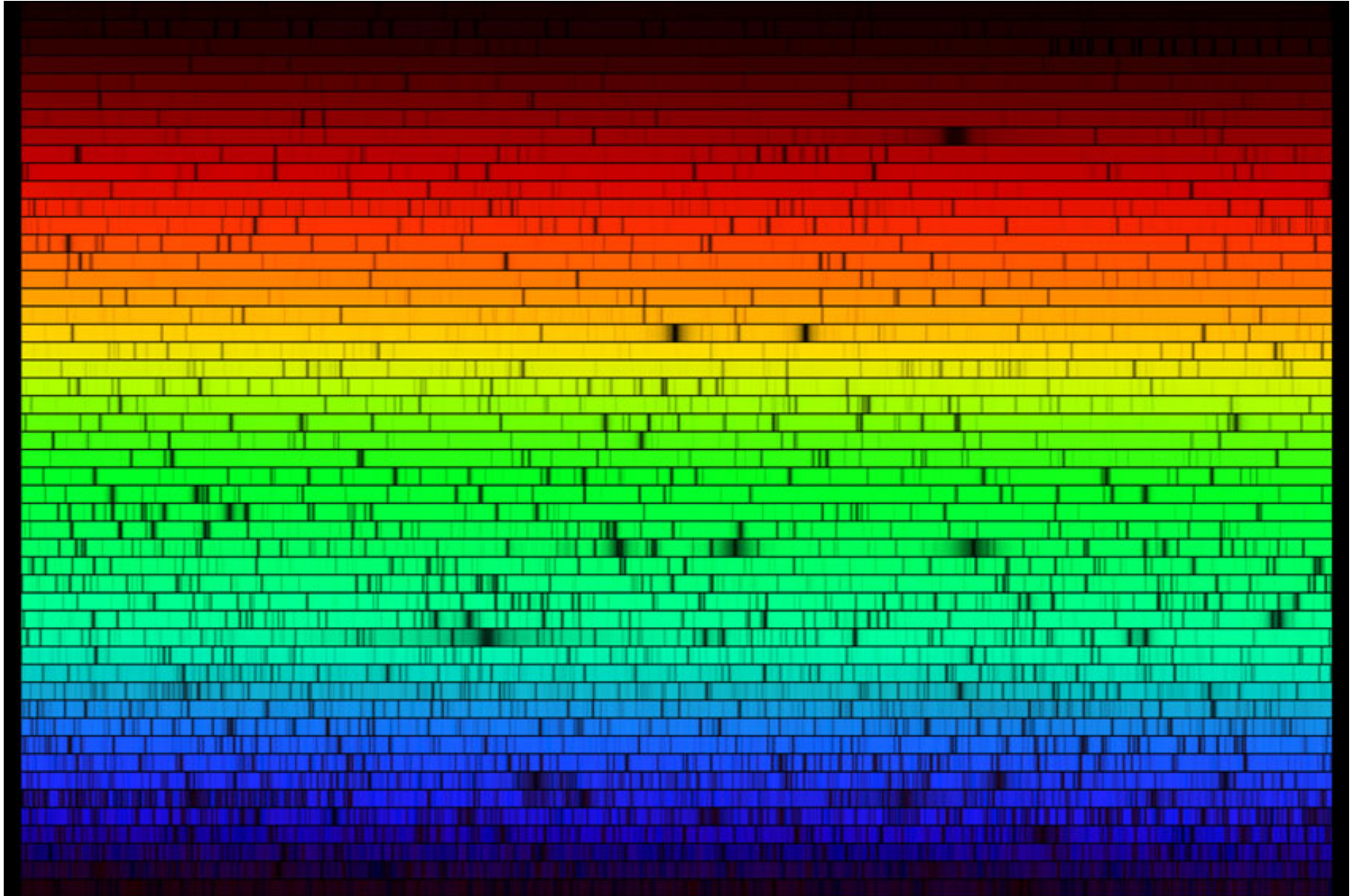
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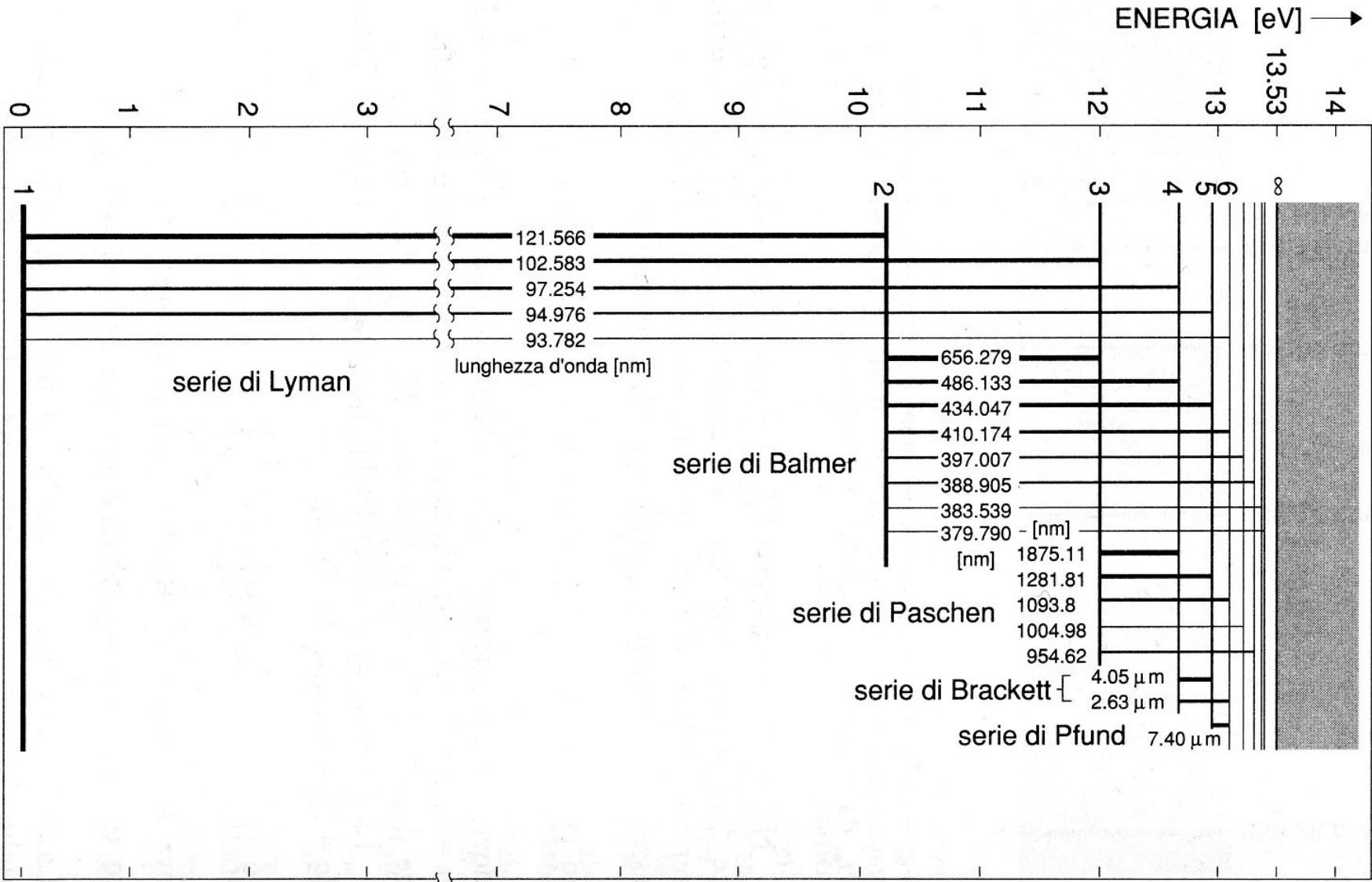


- **immagini scientifiche**

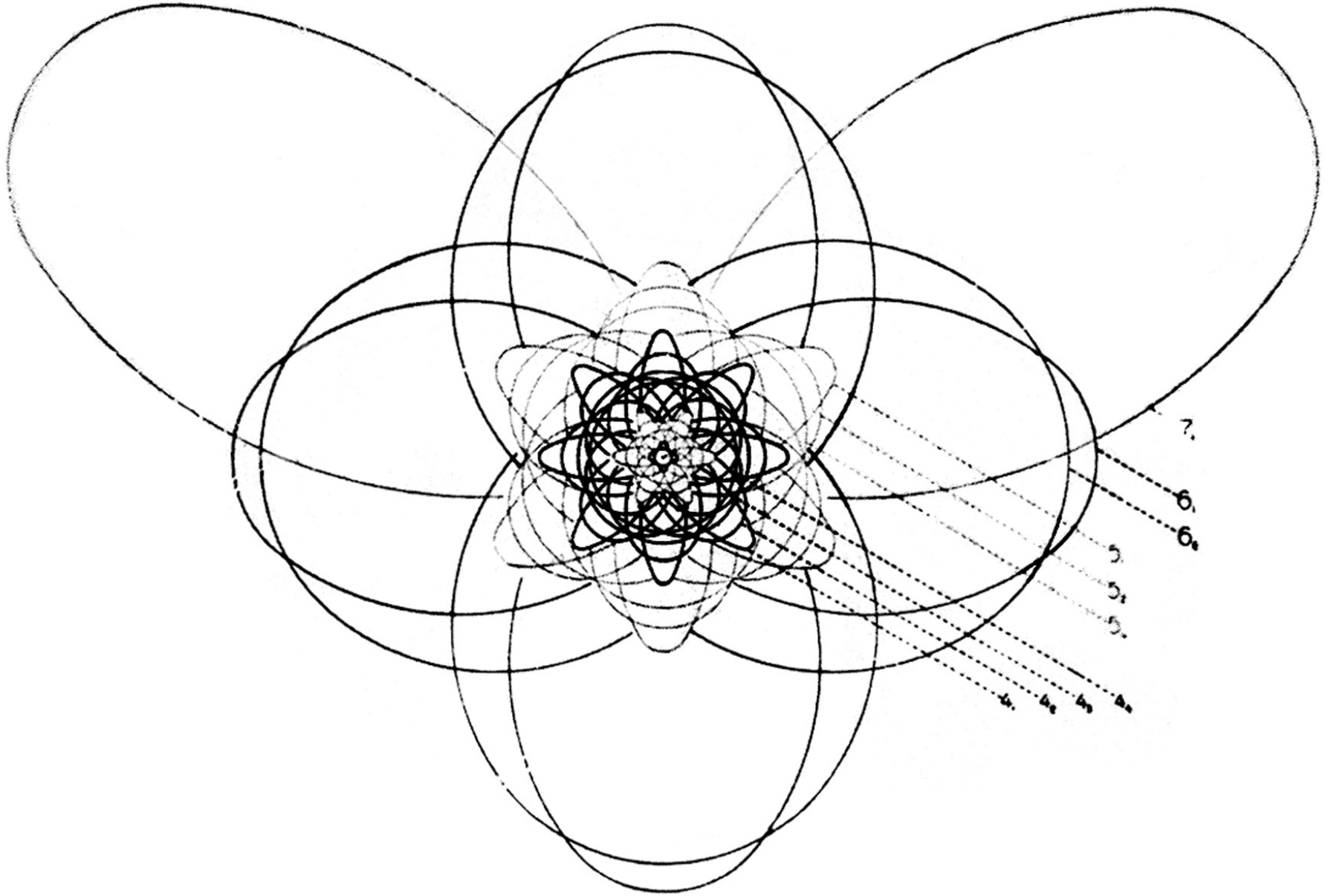


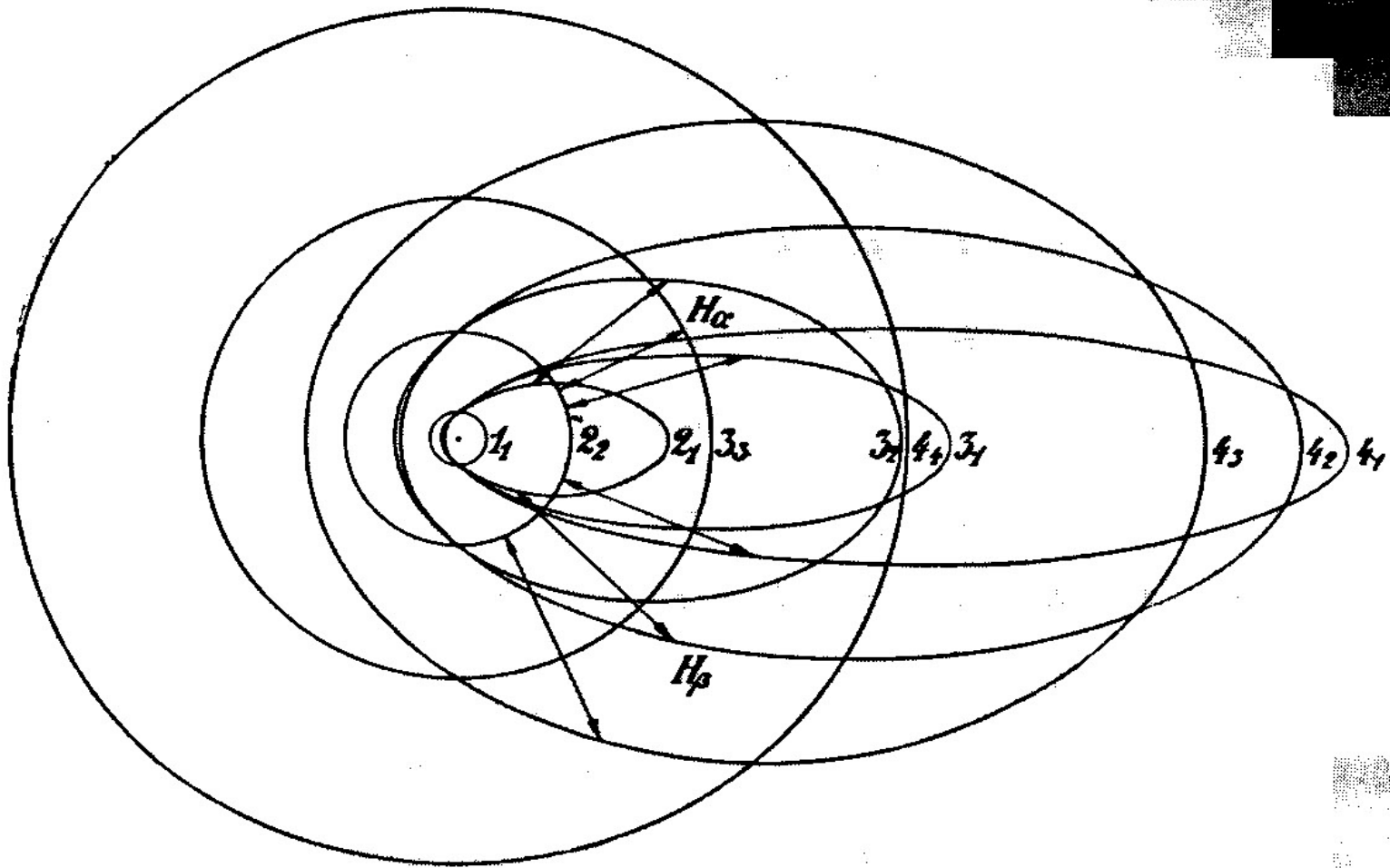
# • informazioni sui contenuti scientifici

Fig. 9.3 - Diagramma dei livelli energetici dell'atomo di idrogeno.



- **disegni originali di Bohr**





**configurazione delle orbite atomiche**

# *fil rouge 2*

**la teoria atomica di Bohr come culmine  
dell'evoluzione della visione atomistica della  
natura**

❖ **proiezione nel passato**

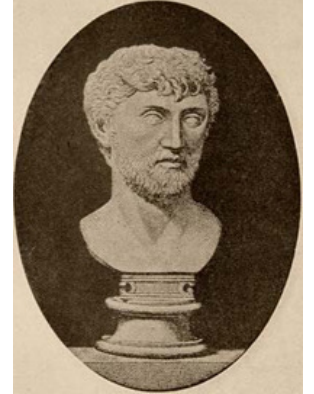
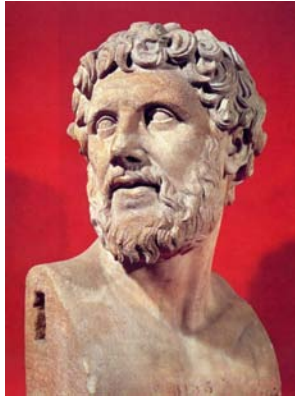
*titolo della mostra*

**1913: finalmente l'atomo!**

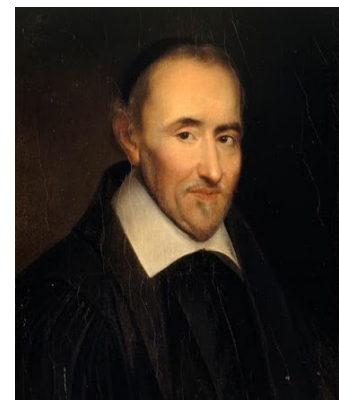
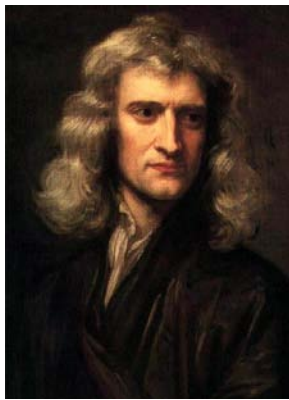
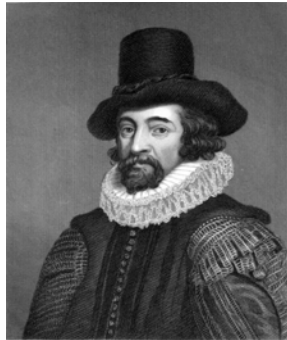
**dopo una gestazione durata 25 secoli**

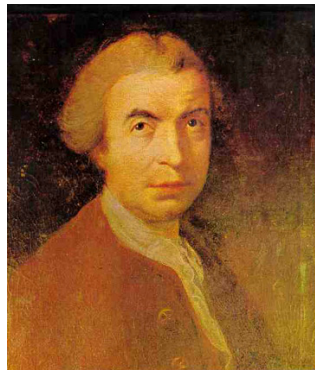
## *fil rouge 2*

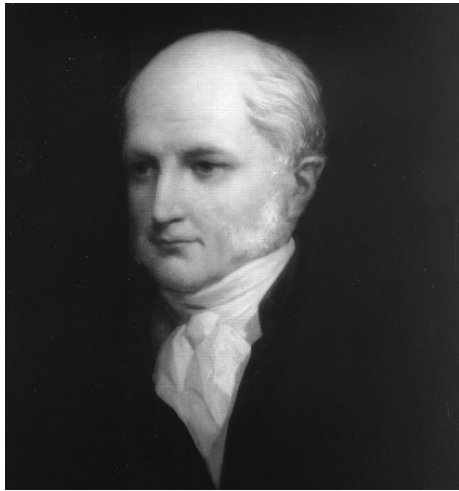
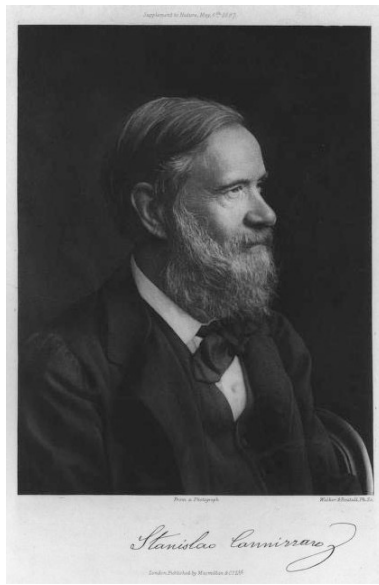
- principi dell'atomismo "canonico"
- atomos, paramanu, minima naturalia, atomi
- atomismo antico dai Nyaya-Vaisehika a d'Autrecourt
- la rinascita nel XVII secolo, da Bruno a Newton
- lo sviluppo nel XVIII secolo, da Stahl a Lavoisier
- concezione operativa nella chimica dell'800, da Dalton a Cannizzaro
- la "guerra atomica" fra i fisici dell'800
- l'atomo alla riscossa, Boltzmann ed Einstein
- segnali atomici sperimentali
- la ridda dei modelli atomici
- l'atomo nucleare
- sboccia l'atomo con la teoria di Bohr











# **modelli atomici**

- modello nucleo-planetario (Jean Baptiste Perrin 1901)**
- modello a “dinamidi” (Philipp Lenard 1903)**
- modello saturniano (Hantaro Nagaoka 1903)**
- modello a carica distribuita  
(Joseph John Thomson 1904)**
- modello elettronico fluido  
(John William Strutt, 3rd Baron Rayleigh 1906)**
- modello a elettroni vibranti  
(James Hopwood Jeans 1906)**
- modello a elettroni che si espandono  
(George Adolphus Schott 1906)**
- modello ad “archioni” (Johannes Stark 1910)**
- modello nucleare  
(Ernest Rutherford, 1st Baron Rutherford 1911)**

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# *fil rouge 3*

**la teoria atomica di Bohr come punto di partenza per la conquista del microscosmo e per la tecnologia contemporanea**

**❖ proiezione nel futuro**

***titolo della mostra***

**1913-2013: l'atomo è 100 anni giovane**

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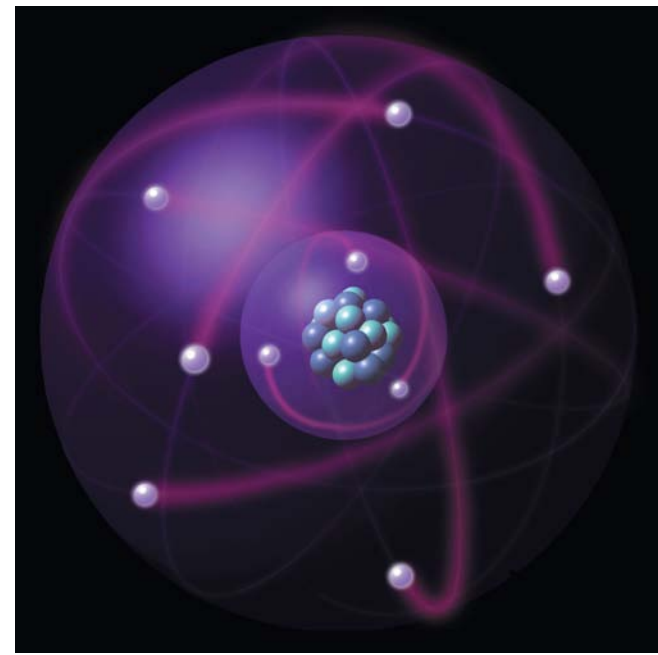
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# *On the Constitution of Atoms and Molecules*

## *fil rouge 3*



- la teoria di Bohr e la struttura atomica
- la teoria di Bohr e il trionfo della teoria dei quanti
- la conquista dell'universo atomico e molecolare:  
tavola periodica degli elementi, legami chimici,  
spettroscopia, raggi X, assorbimento ed emissione della  
radiazione, termodinamiche bosonica e fermionica,  
separazione proprietà atomiche e nucleari, legge dello  
spostamento radioattivo



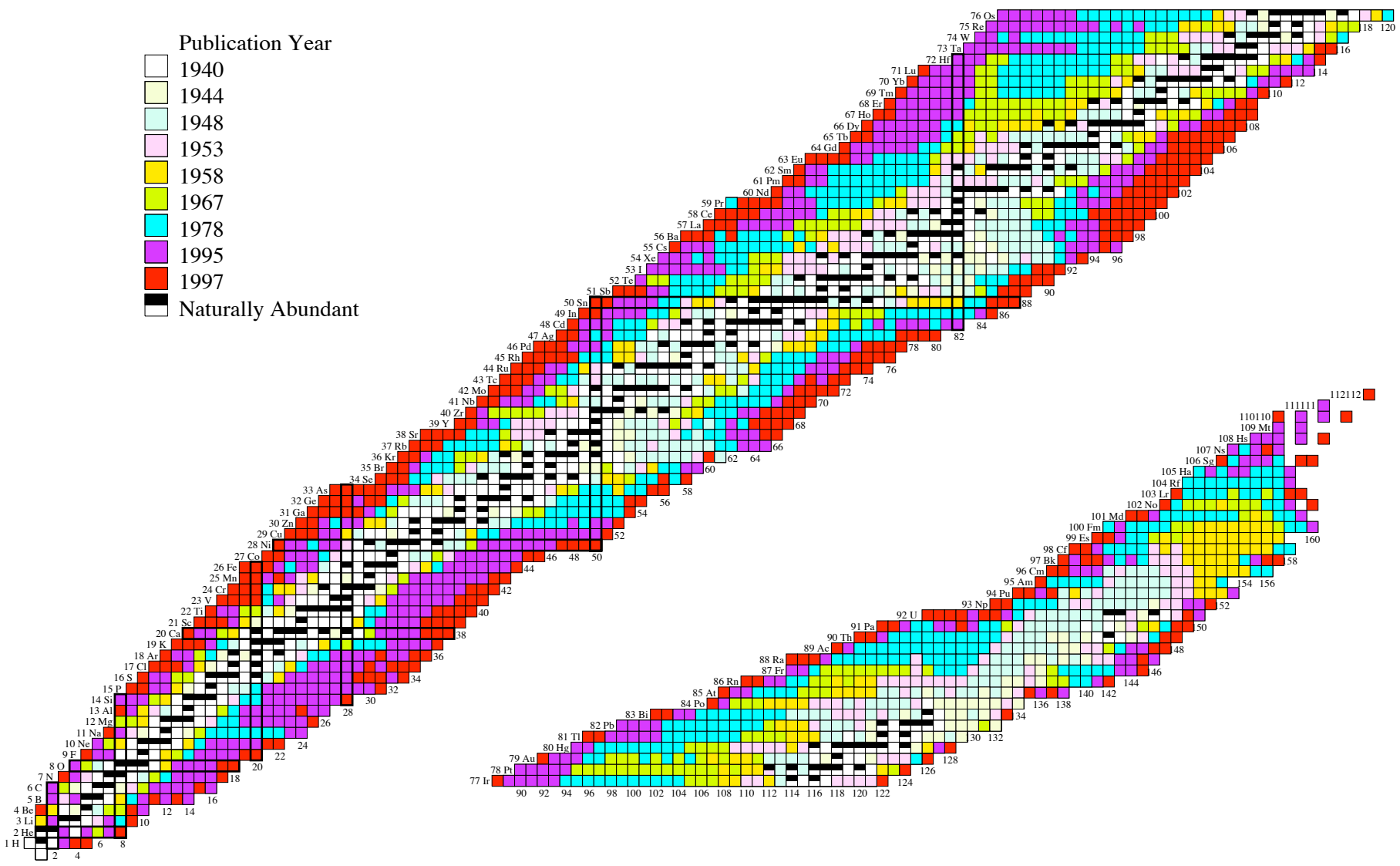
## ***fil rouge 3***

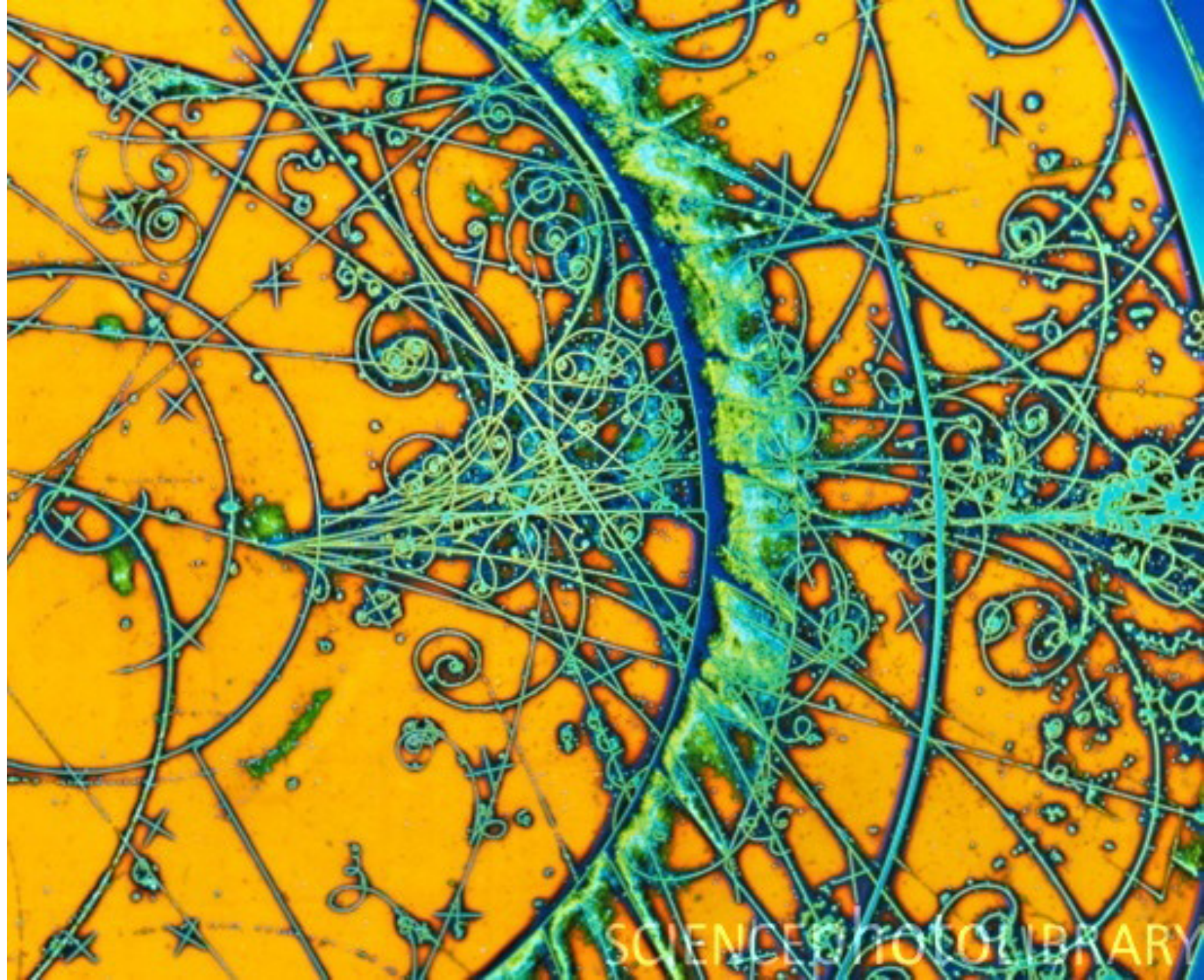
- sviluppo della meccanica quantistica
- la conquista dell'universo dei nuclei atomici
- sviluppo della teoria quantistica di campo
- la conquista dell'universo subnucleare
- la conquista del mesomondo e del macromondo: nanoscienze, macromolecole biologiche, cristalli, materia condensata, stelle di neutroni e buchi neri, cosmologia quantistica



# Le specie nucleari: elementi e isotopi

## Evolution of the *Table of Isotopes*





# Three generations of matter (fermions)

|          | I                            | II                         | III                        |                           |                      |
|----------|------------------------------|----------------------------|----------------------------|---------------------------|----------------------|
| mass →   | 2.4 MeV/c <sup>2</sup>       | 1.27 GeV/c <sup>2</sup>    | 171.2 GeV/c <sup>2</sup>   | 0                         | ? GeV/c <sup>2</sup> |
| charge → | $\frac{2}{3}$                | $\frac{2}{3}$              | $\frac{2}{3}$              | 0                         | 0                    |
| spin →   | $\frac{1}{2}$                | $\frac{1}{2}$              | $\frac{1}{2}$              | 1                         | 0                    |
| name →   | u<br>up                      | c<br>charm                 | t<br>top                   | $\gamma$<br>photon        | H<br>Higgs boson     |
| Quarks   | 4.8 MeV/c <sup>2</sup>       | 104 MeV/c <sup>2</sup>     | 4.2 GeV/c <sup>2</sup>     | 0                         |                      |
|          | $-\frac{1}{3}$               | $-\frac{1}{3}$             | $-\frac{1}{3}$             | 0                         |                      |
|          | $\frac{1}{2}$                | $\frac{1}{2}$              | $\frac{1}{2}$              | 1                         |                      |
|          | d<br>down                    | s<br>strange               | b<br>bottom                | g<br>gluon                |                      |
| Leptons  | <2.2 eV/c <sup>2</sup>       | <0.17 MeV/c <sup>2</sup>   | <15.5 MeV/c <sup>2</sup>   | 91.2 GeV/c <sup>2</sup>   |                      |
|          | 0                            | 0                          | 0                          | 0                         |                      |
|          | $\frac{1}{2}$                | $\frac{1}{2}$              | $\frac{1}{2}$              | 1                         |                      |
|          | $\nu_e$<br>electron neutrino | $\nu_\mu$<br>muon neutrino | $\nu_\tau$<br>tau neutrino | Z <sup>0</sup><br>Z boson |                      |
|          | 0.511 MeV/c <sup>2</sup>     | 105.7 MeV/c <sup>2</sup>   | 1.777 GeV/c <sup>2</sup>   | 80.4 GeV/c <sup>2</sup>   |                      |
|          | -1                           | -1                         | -1                         | $\pm 1$                   |                      |
|          | $\frac{1}{2}$                | $\frac{1}{2}$              | $\frac{1}{2}$              | 1                         |                      |
|          | e<br>electron                | $\mu$<br>muon              | $\tau$<br>tau              | W <sup>±</sup><br>W boson | Gauge bosons         |

# *fil rouge* 3 la conquista della tecnologia



## *fil rouge 3*

### **la conquista della tecnologia:**

**radar e tubi elettronici a vuoto, maser e laser, elettronica a semiconduttori, diffrazione a raggi-X e a neutroni, SQUID, interferometria, analisi non distruttive, energia nucleare, energia da fusione termonucleare, microscopia elettronica e a protoni, risonanza magnetica nucleare, indagini mediche con spect e pet, radiofarmaci, radioterapia, superconduttività, ultracriogenia, telecomunicazioni, calcolatori digitali, computazione quantistica, CCD Charge Coupled Device sensor, saldatura a elettroni...**

# approccio sincronico

nel 1913 è successo qualcos'altro di grande portata nel mondo scientifico?

si possono individuare dei collegamenti fra la teoria atomica e altre profonde modificazioni contemporanee dei paradigmi scientifici?

è possibile un *fil rouge* 4?

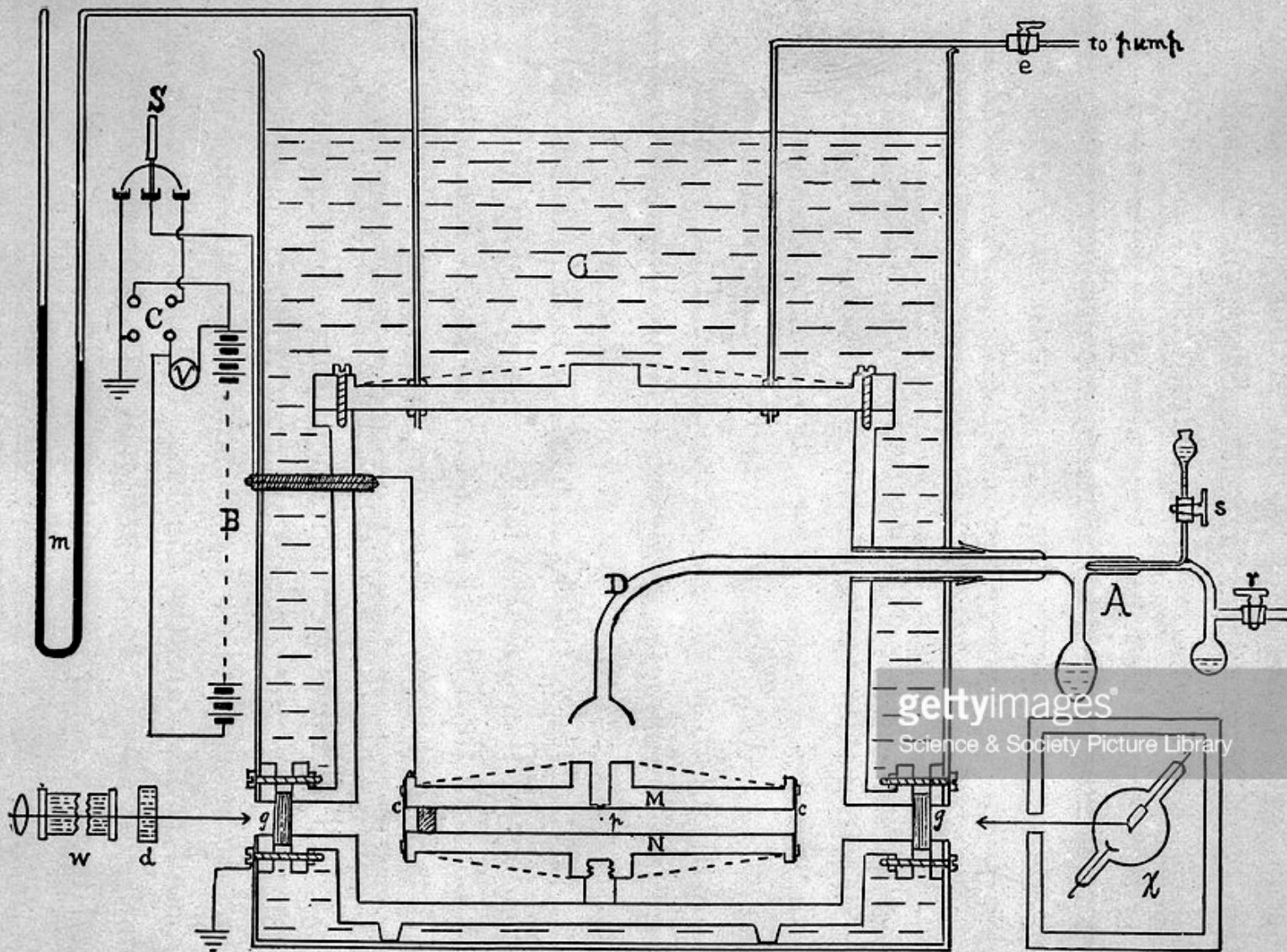
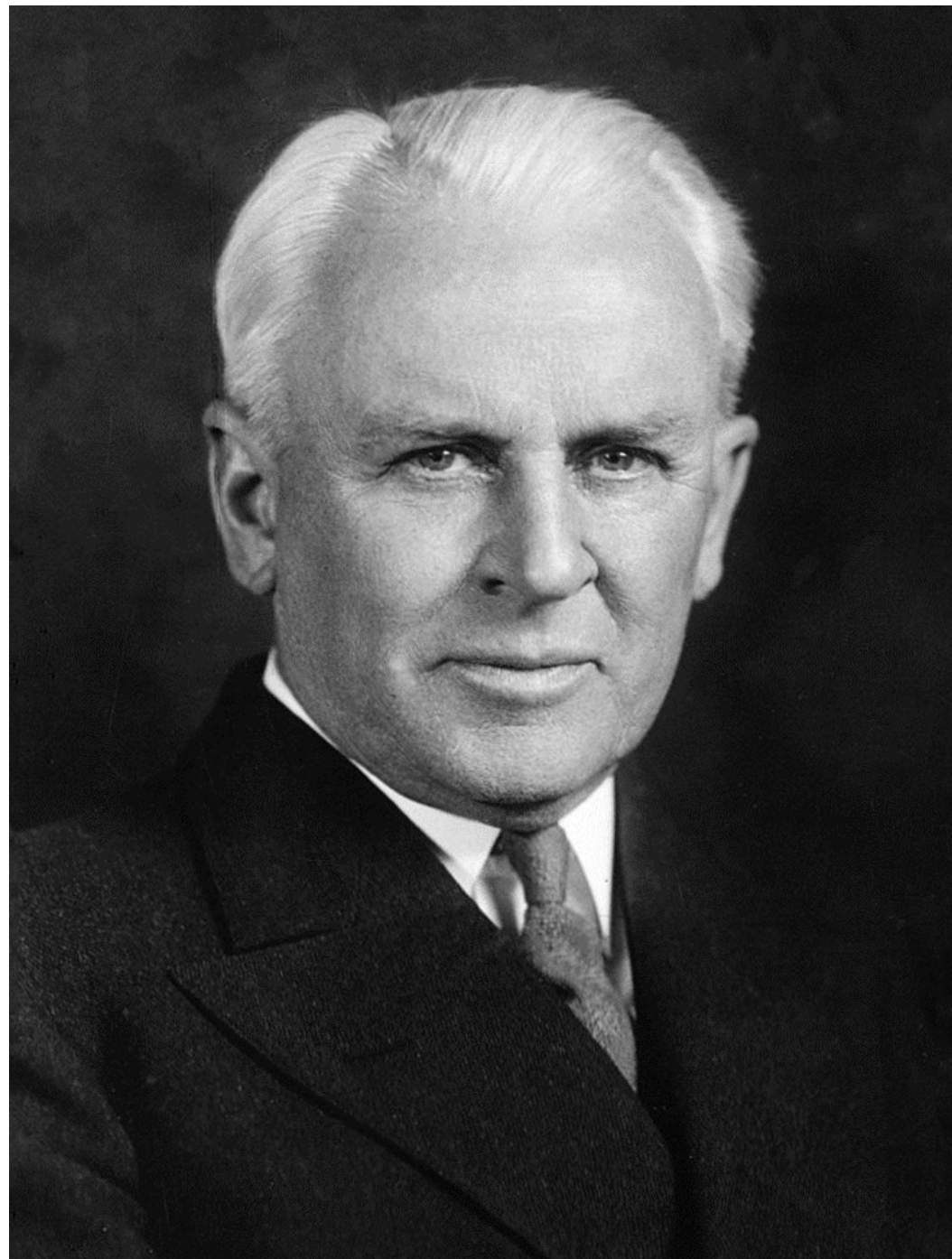
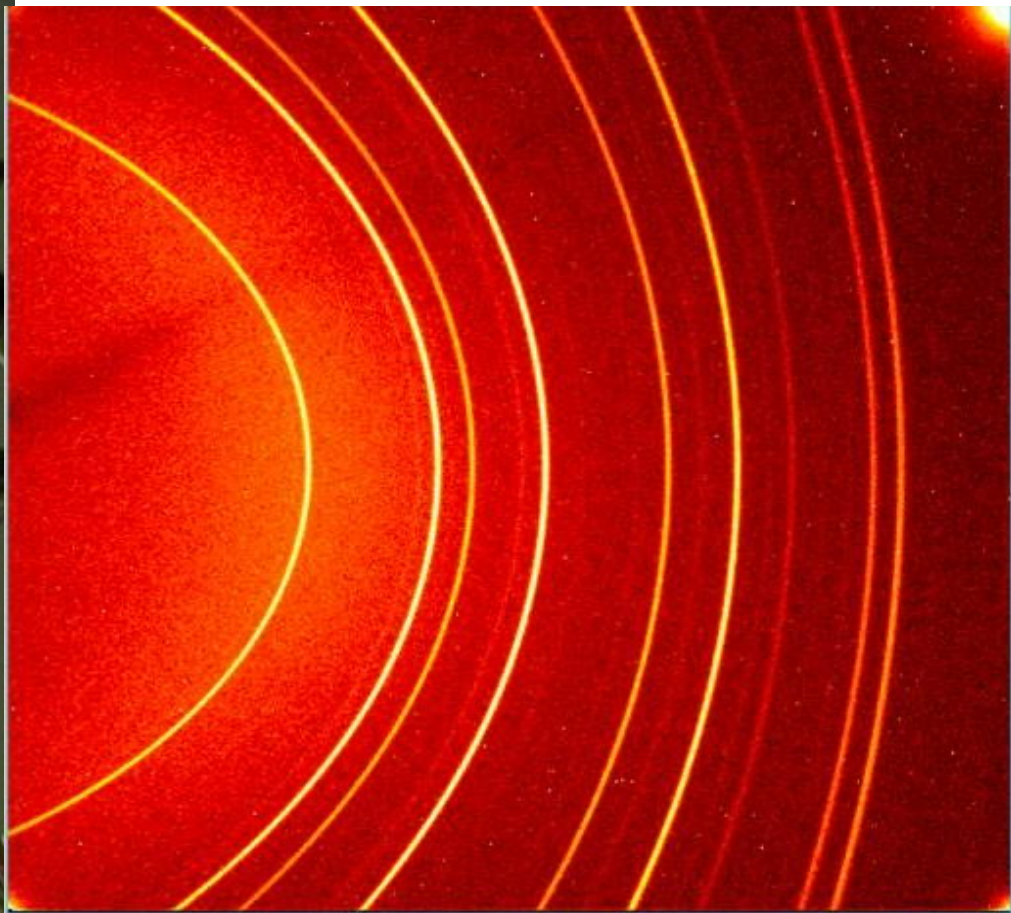
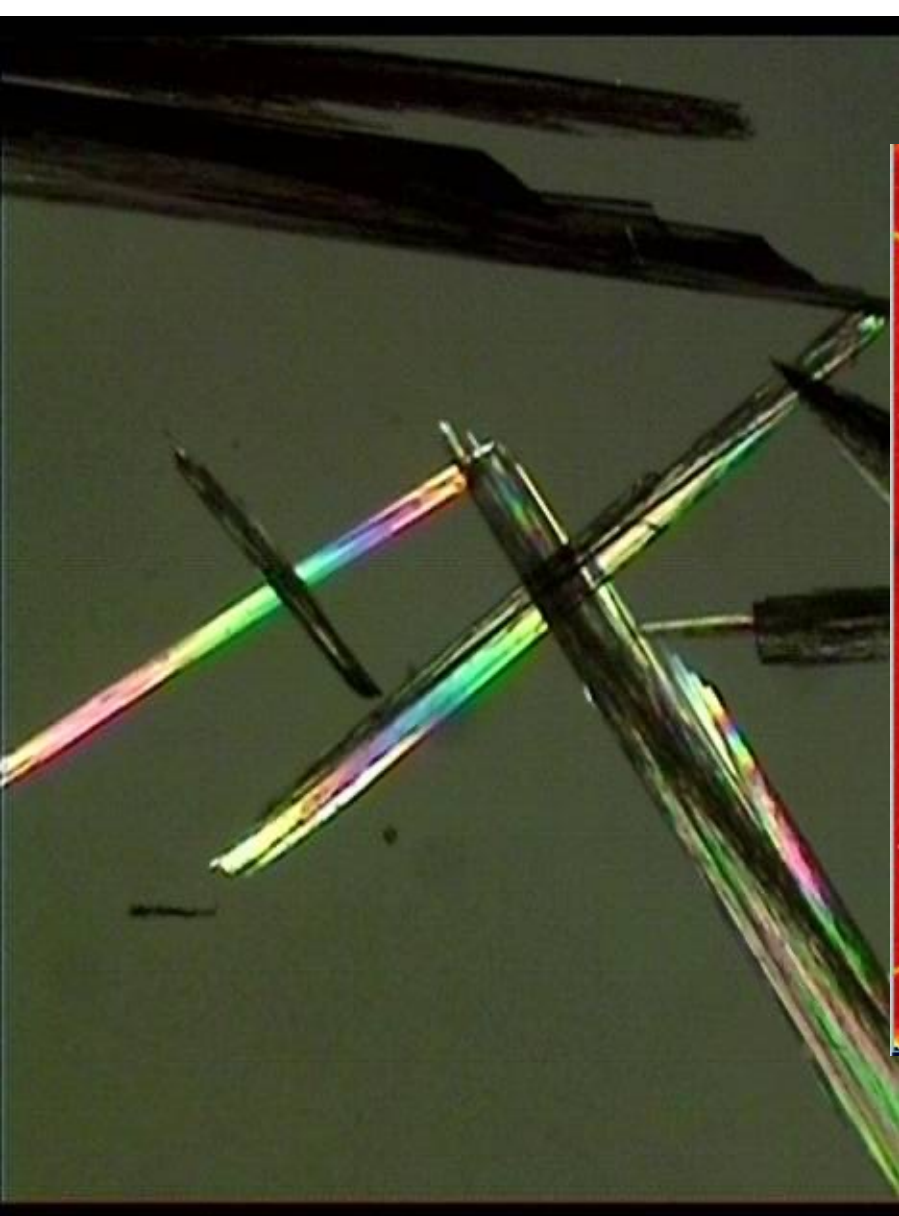


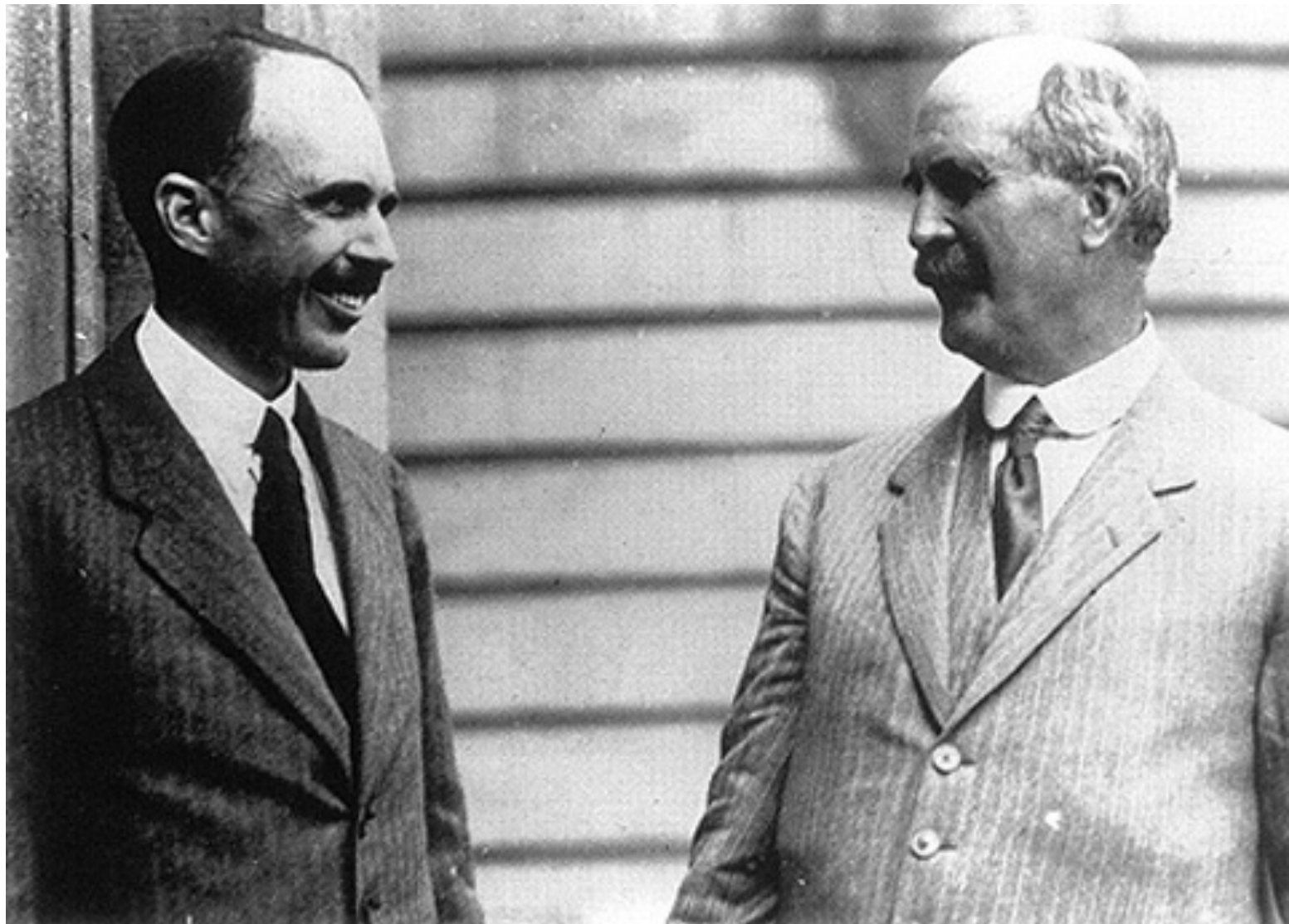
FIG. 8.—A, atomizer through which the oil spray is blown into the cylindrical vessel D. G, oil tank to keep the temperature constant. M and N, circular brass plates, electrical field produced by throwing on 10,000-volt battery B. Light from arc lamp a after heat rays are removed by passage through w and d, enters chamber through glass window g and illuminates droplet p between plates M and N through the pinhole in M. Additional ions are produced about p by rays from the bulb X.



**Robert Andrews  
Millikan  
misura la carica  
elettrica  
dell'elettrone**







**William Henry e William Lawrence Bragg  
studiano molecole e cristalli con la diffrazione  
dei raggi-X**

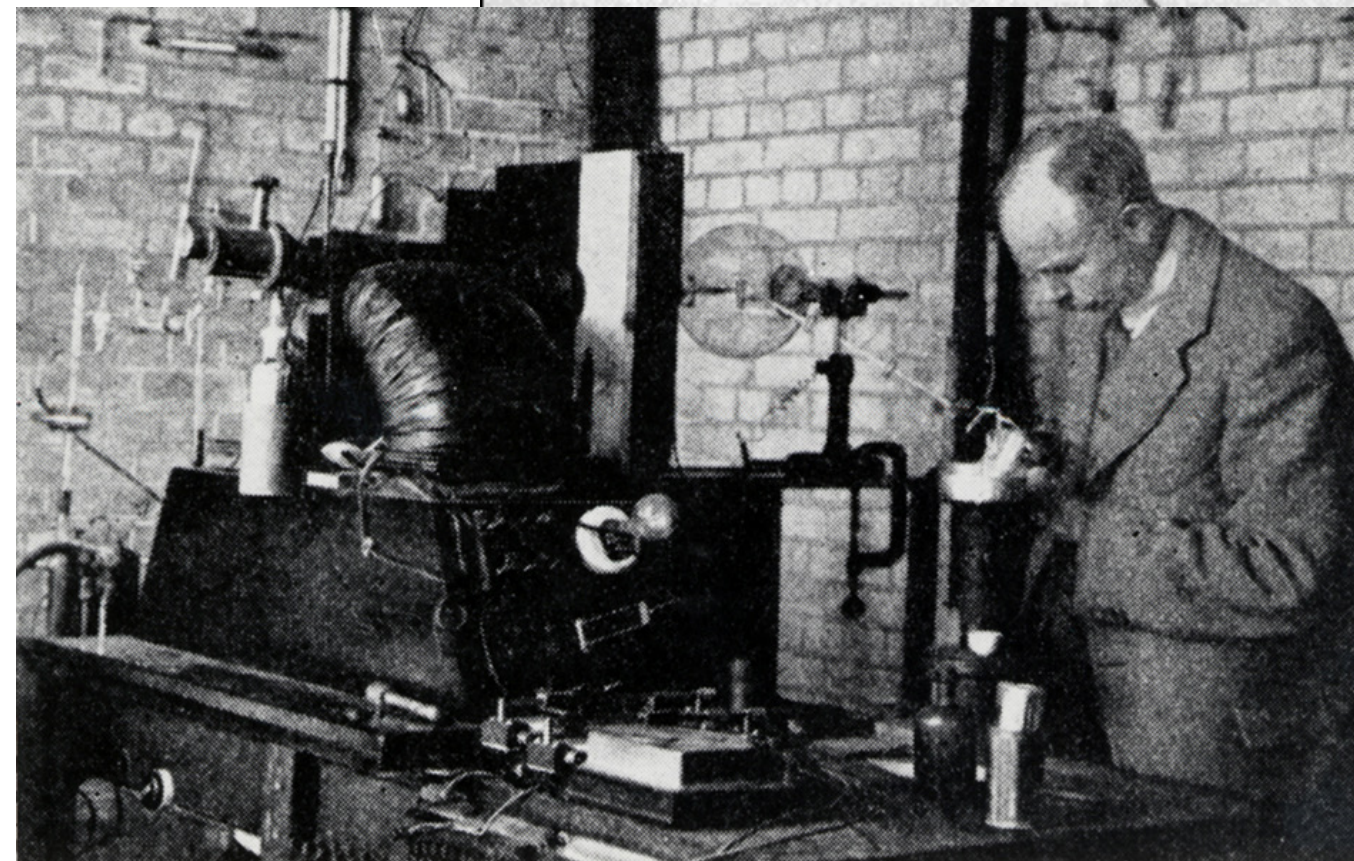
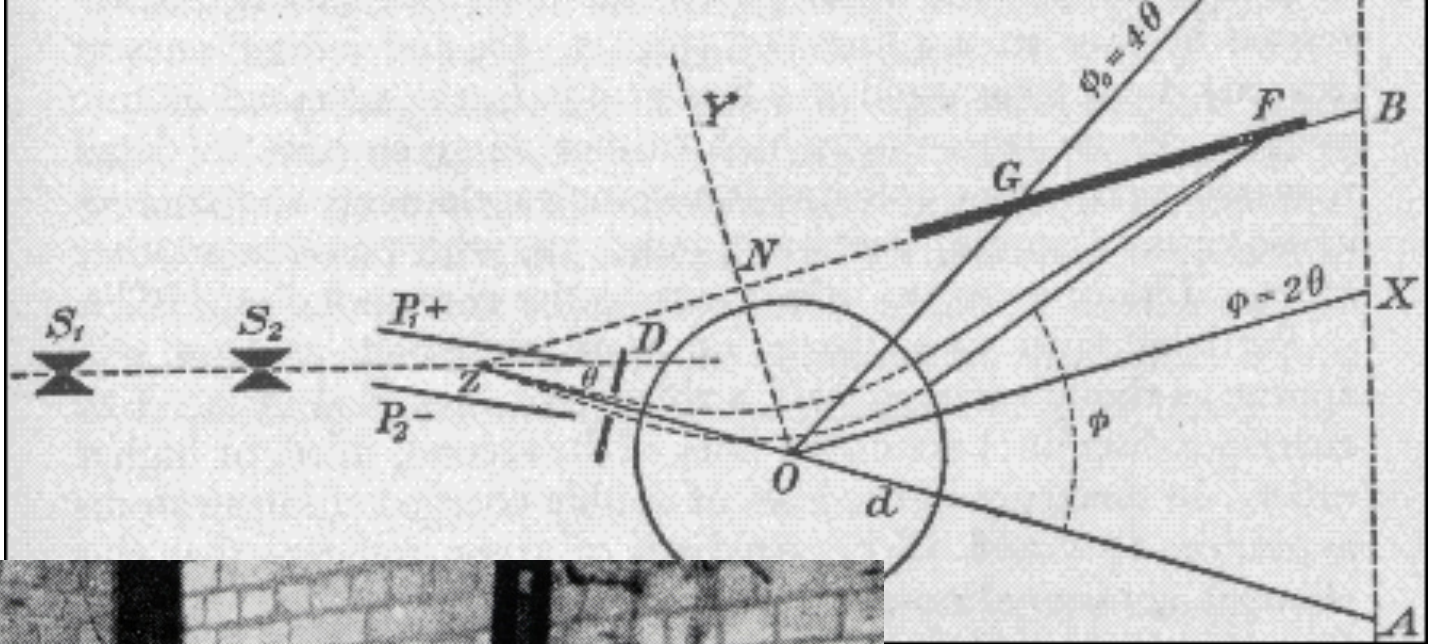


WH bragg

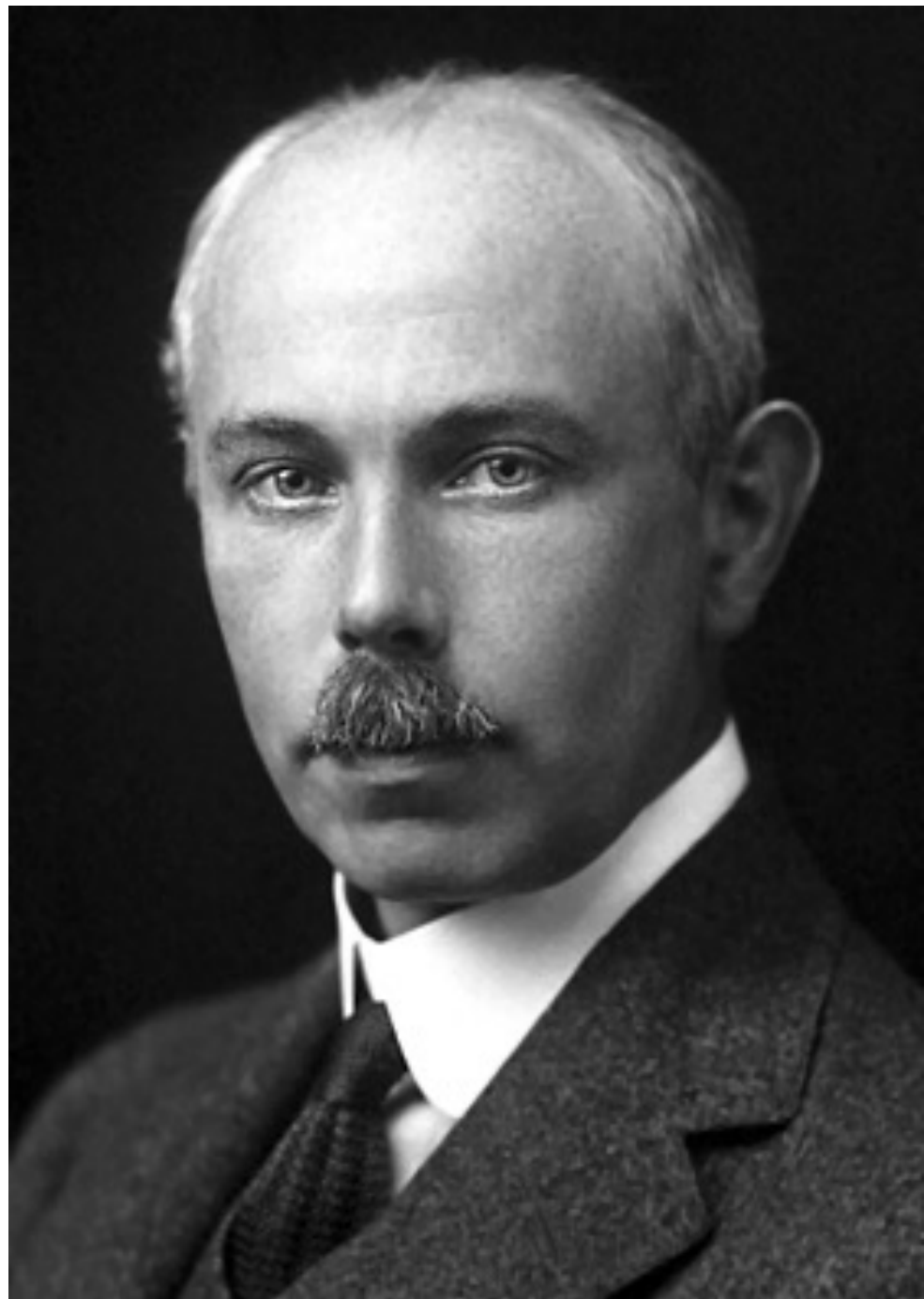
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**un grande divulgatore**

**WH Bragg giving the 1961 Xmas Lecture**



**Francis William Aston  
scopre gli isotopi  
atomici con la  
spettrometria di  
massa**



High-Frequency Spectra of the Elements.

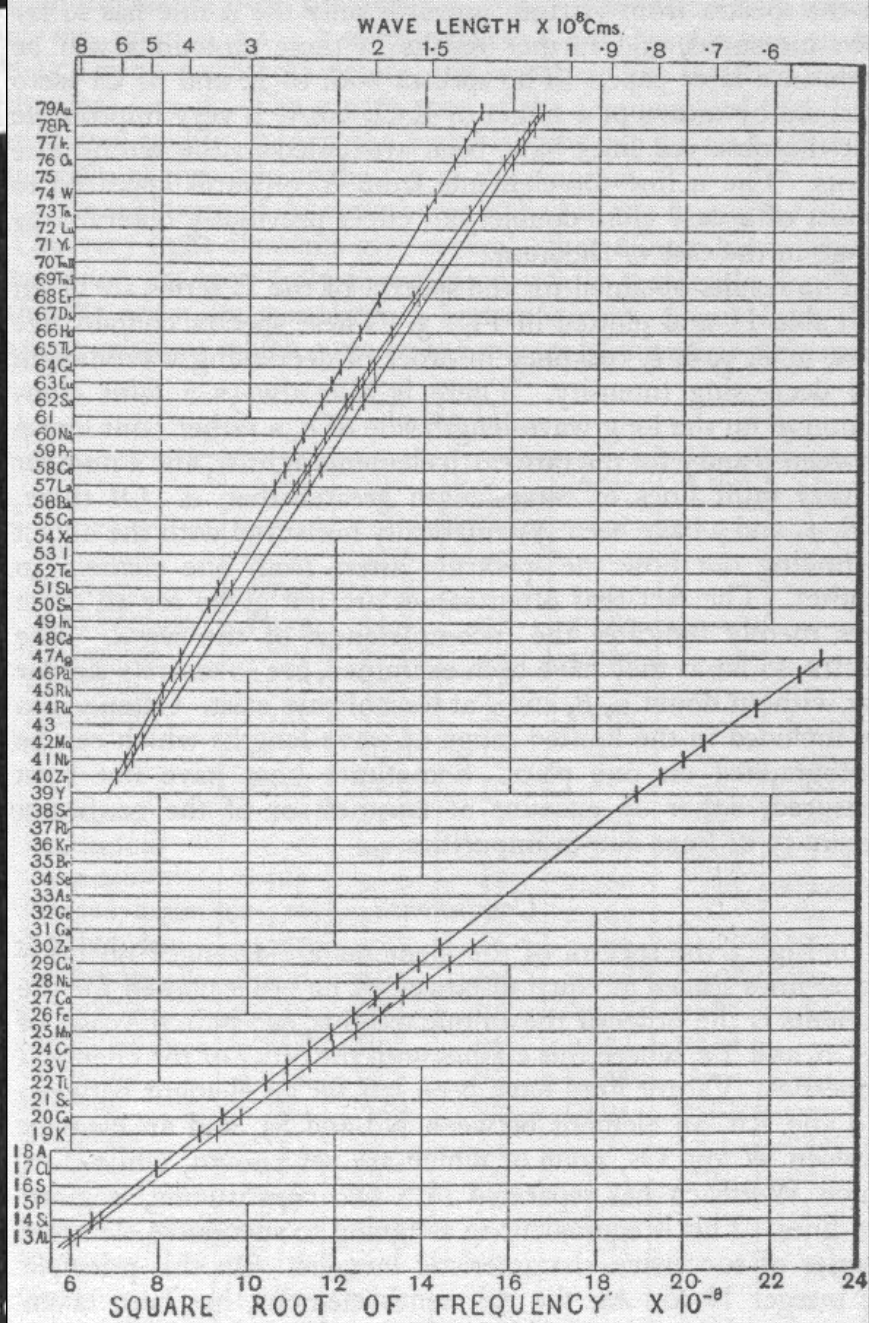
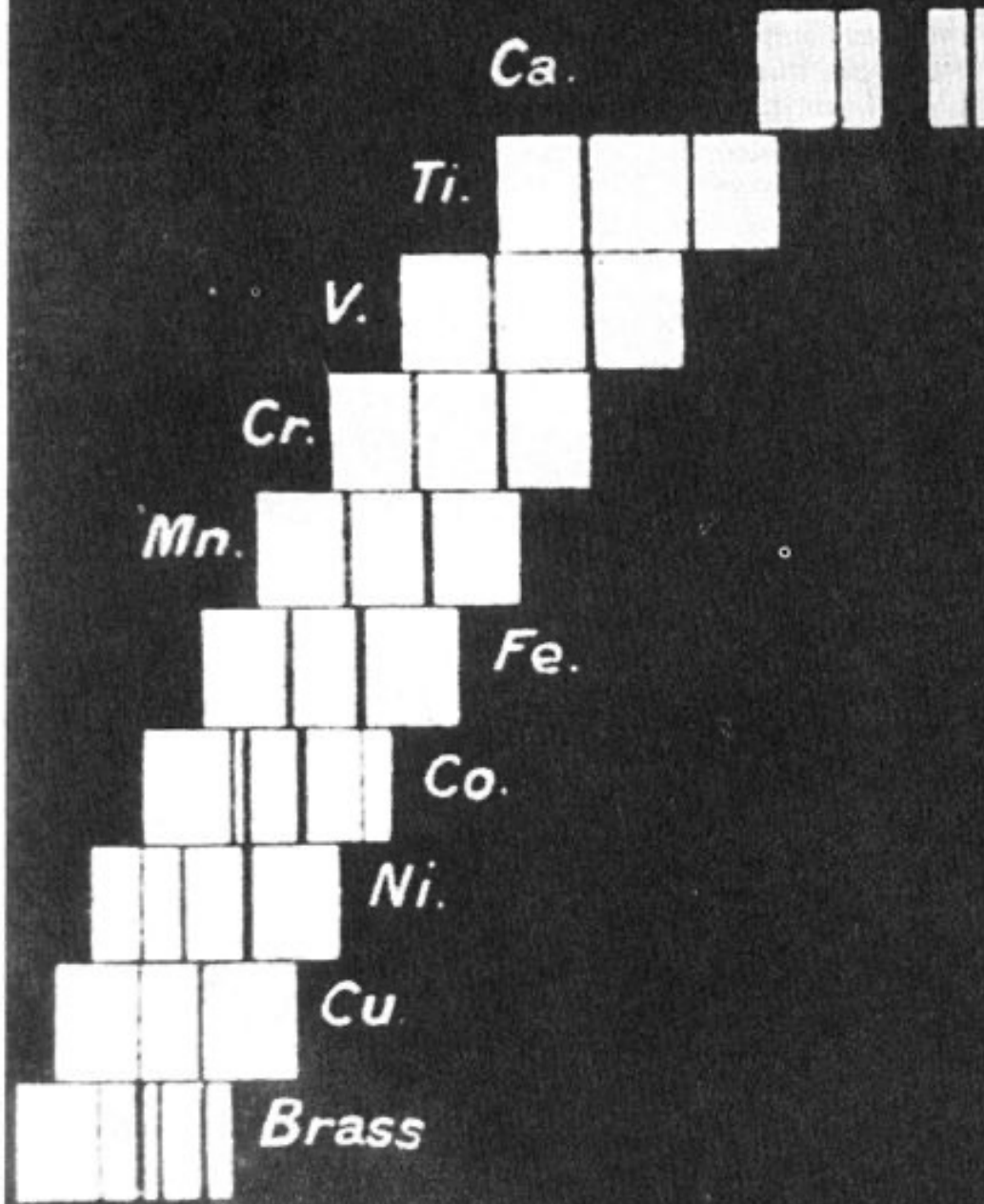


Fig. 3.

Proton number

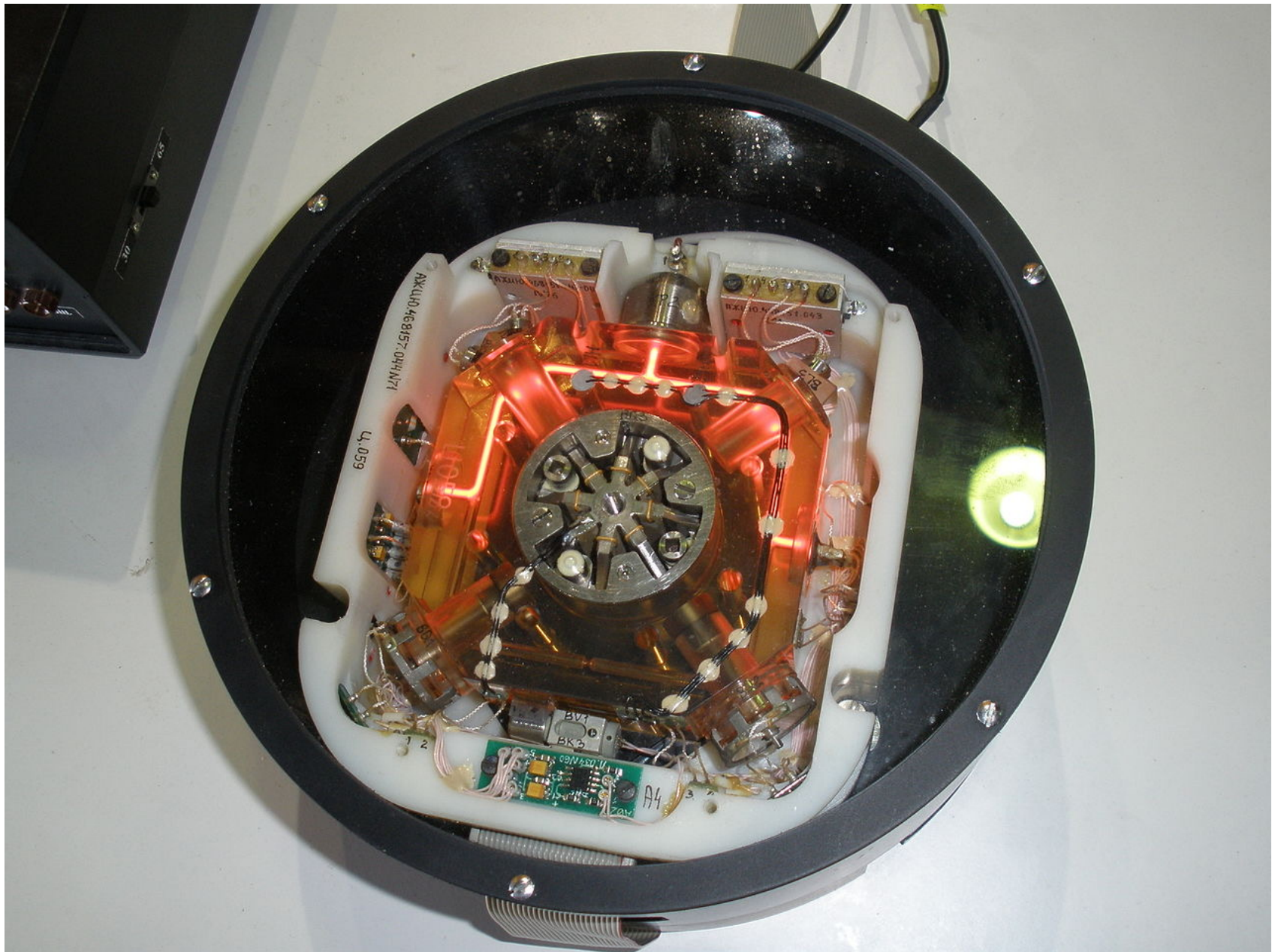
|                                    |                                 |                                |                                 |                                |                                    |                               |                               |                               |                                 |                               |                               |                              |                                  |                               |
|------------------------------------|---------------------------------|--------------------------------|---------------------------------|--------------------------------|------------------------------------|-------------------------------|-------------------------------|-------------------------------|---------------------------------|-------------------------------|-------------------------------|------------------------------|----------------------------------|-------------------------------|
| Se66<br>0+                         | Se67<br>60 ms<br>ECp            | Se68<br>55.5 s<br>0+           | Se69<br>27.4 s<br>(3/2-)<br>ECp | Se70<br>41.1 m<br>0+           | Se71<br>4.34 m<br>3/2-, 5/2-<br>EC | Se72<br>8.40 d<br>0+          | Se73<br>7.15 h<br>9/2+<br>EC  | Se74<br>0+                    | Se75<br>119.779 d<br>5/2+<br>EC | Se76<br>0+                    | Se77<br>7.65 s<br>1/2+<br>β   | Se78<br>23.78 s<br>β         | Se79<br>1.3306 y<br>7/2+<br>β    | Se80<br>0+                    |
| As65<br>0.19 s<br>EC               | As66<br>95.77 ms<br>EC          | As67<br>42.5 s<br>(5/2-)<br>EC | As68<br>151.6 s<br>3+<br>EC     | As69<br>15.2 m<br>5/2-<br>EC   | As70<br>52.6 m<br>4(+)<br>EC       | As71<br>65.28 h<br>5/2-<br>EC | As72<br>26.8 h<br>2-<br>EC    | As73<br>80.36 d<br>3/2-<br>EC | As74<br>17.77 d<br>2-<br>ECβ    | As75<br>100 s<br>3/2-<br>β    | As76<br>10778 d<br>β          | As77<br>38.83 h<br>3/2-<br>β | As78<br>90.7 m<br>2-<br>β        | As79<br>9.01 m<br>3/2-<br>β   |
| Ge64<br>63.7 s<br>0+               | Ge65<br>30.9 s<br>(3/2-)<br>ECp | Ge66<br>2.26 h<br>0+           | Ge67<br>18.9 m<br>1/2-<br>EC    | Ge68<br>270.8 d<br>0+          | Ge69<br>39.05 h<br>5/2-<br>EC      | Ge70<br>21.23 h<br>0+         | Ge71<br>11.43 d<br>1/2+<br>EC | Ge72<br>27.66 h<br>0+         | Ge73<br>7.73 s<br>1/2+<br>β     | Ge74<br>35.94 s<br>β          | Ge75<br>62.78 m<br>2-<br>β    | Ge76<br>0+                   | Ge77<br>11.20 h<br>7/2+<br>β     | Ge78<br>88.0 ms<br>0+         |
| Ga63<br>32.4 s<br>3/2-, 5/2-<br>EC | Ga64<br>2.627 m<br>0+           | Ga65<br>15.2 m<br>3/2-<br>EC   | Ga66<br>9.49 h<br>0+            | Ga67<br>3.2612 d<br>3/2-<br>EC | Ga68<br>67.629 m<br>1+<br>EC       | Ga69<br>60.108 s<br>3/2-<br>β | Ga70<br>20.14 m<br>ECβ        | Ga71<br>39.892 s<br>β         | Ga72<br>13.10 h<br>1/2+<br>β    | Ga73<br>4.86 h<br>3/2-<br>β   | Ga74<br>8.12 m<br>(3-)<br>β   | Ga75<br>126 s<br>3/2-<br>β   | Ga76<br>32.6 s<br>(2+, 3+)<br>β  | Ga77<br>13.2 s<br>(3/2-)<br>β |
| Zn62<br>9.186 h<br>0+              | Zn63<br>38.47 m<br>3/2-<br>EC   | Zn64<br>0+                     | Zn65<br>244.26 d<br>5/2-<br>EC  | Zn66<br>0+                     | Zn67<br>5.2-<br>0+                 | Zn68<br>18.8 s<br>β           | Zn69<br>36.4 m<br>3/2-<br>β   | Zn70<br>2.14 y<br>0+          | Zn71<br>2.45 m<br>0+            | Zn72<br>46.5 h<br>0+          | Zn73<br>23.5 s<br>(1/2-)<br>β | Zn74<br>95.6 s<br>0+         | Zn75<br>10.2 s<br>(7/2+)<br>β    | Zn76<br>5.7 s<br>0+           |
| Cu61<br>3.333 h<br>3/2-<br>EC      | Cu62<br>9.74 m<br>1+<br>EC      | Cu63<br>69.17 s<br>3/2-<br>β   | Cu64<br>0.198 h<br>1+<br>ECβ    | Cu65<br>30.83 s<br>β           | Cu66<br>9.098 m<br>1+<br>β         | Cu67<br>41.83 h<br>3/2-<br>β  | Cu68<br>31.1 s<br>1+<br>β     | Cu69<br>2.85 m<br>3/2-<br>β   | Cu70<br>4.5 s<br>(1+)<br>β      | Cu71<br>19.5 s<br>(3/2+)<br>β | Cu72<br>6.6 s<br>(1+)<br>β    | Cu73<br>3.9 s<br>β           | Cu74<br>1.594 s<br>(1+, 3+)<br>β | Cu75<br>1.224 s<br>β          |
| Ni60<br>26.273 s<br>0+             | Ni61<br>1.140 s<br>3/2-<br>β    | Ni62<br>3.634 s<br>0+          | Ni63<br>108.1 y<br>4/2-<br>β    | Ni64<br>0.926 s<br>β           | Ni65<br>26172 h<br>β               | Ni66<br>54.6 h<br>0+          | Ni67<br>21 s<br>(1/2-)<br>β   | Ni68<br>19 s<br>0+            | Ni69<br>11.4 s<br>β             | Ni70<br>0+                    | Ni71<br>1.86 s<br>β           | Ni72<br>2.1 s<br>0+          | Ni73<br>0.90 s<br>β              | Ni74<br>1.1 s<br>0+           |

Neutron number →

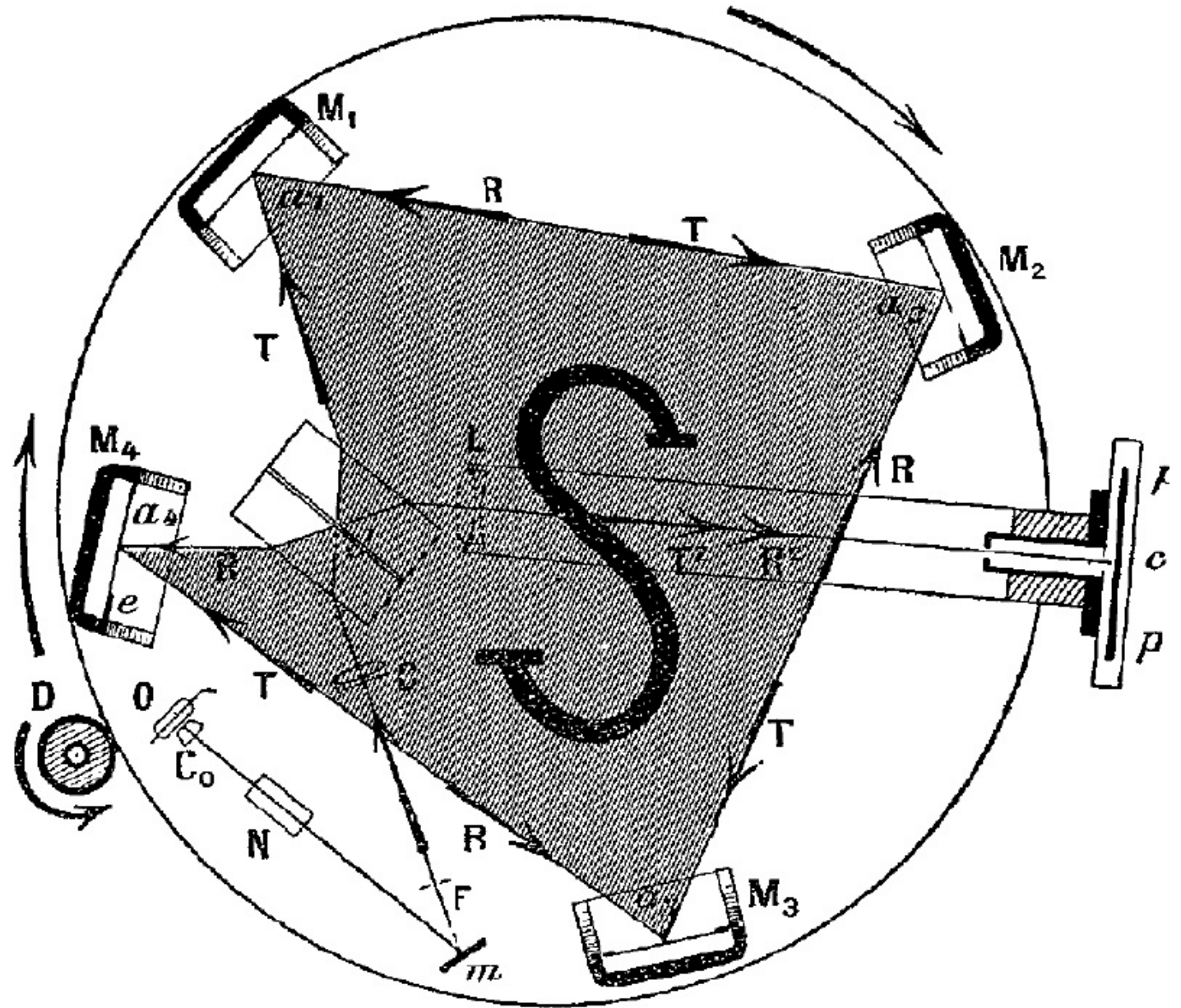




**Henry Gwyn Jeffreys Moseley introduce il numero atomico con ricerche sui raggi-X**



**Giroscopio a laser**



**Effetto di Georges Sagnac**

\*54·43.  $\vdash \therefore \alpha, \beta \in 1 \supset : \alpha \cap \beta = \Lambda \equiv \alpha \cup \beta \in 2$

*Dem.*

$\vdash \cdot *54\cdot26 \supset \vdash \therefore \alpha = \iota'x \cdot \beta = \iota'y \supset : \alpha \cup \beta \in 2 \equiv \cdot x \neq y \cdot$

[\*51·231]  $\equiv \cdot \iota'x \cap \iota'y = \Lambda \cdot$

[\*13·12]  $\equiv \cdot \alpha \cap \beta = \Lambda$  (1)

$\vdash \cdot (1) \cdot *11\cdot11\cdot35 \supset$

$\vdash \therefore (\exists x, y) \cdot \alpha = \iota'x \cdot \beta = \iota'y \supset : \alpha \cup \beta \in 2 \equiv \cdot \alpha \cap \beta = \Lambda$  (2)

$\vdash \cdot (2) \cdot *11\cdot54 \cdot *52\cdot1 \supset \vdash \cdot \text{Prop}$

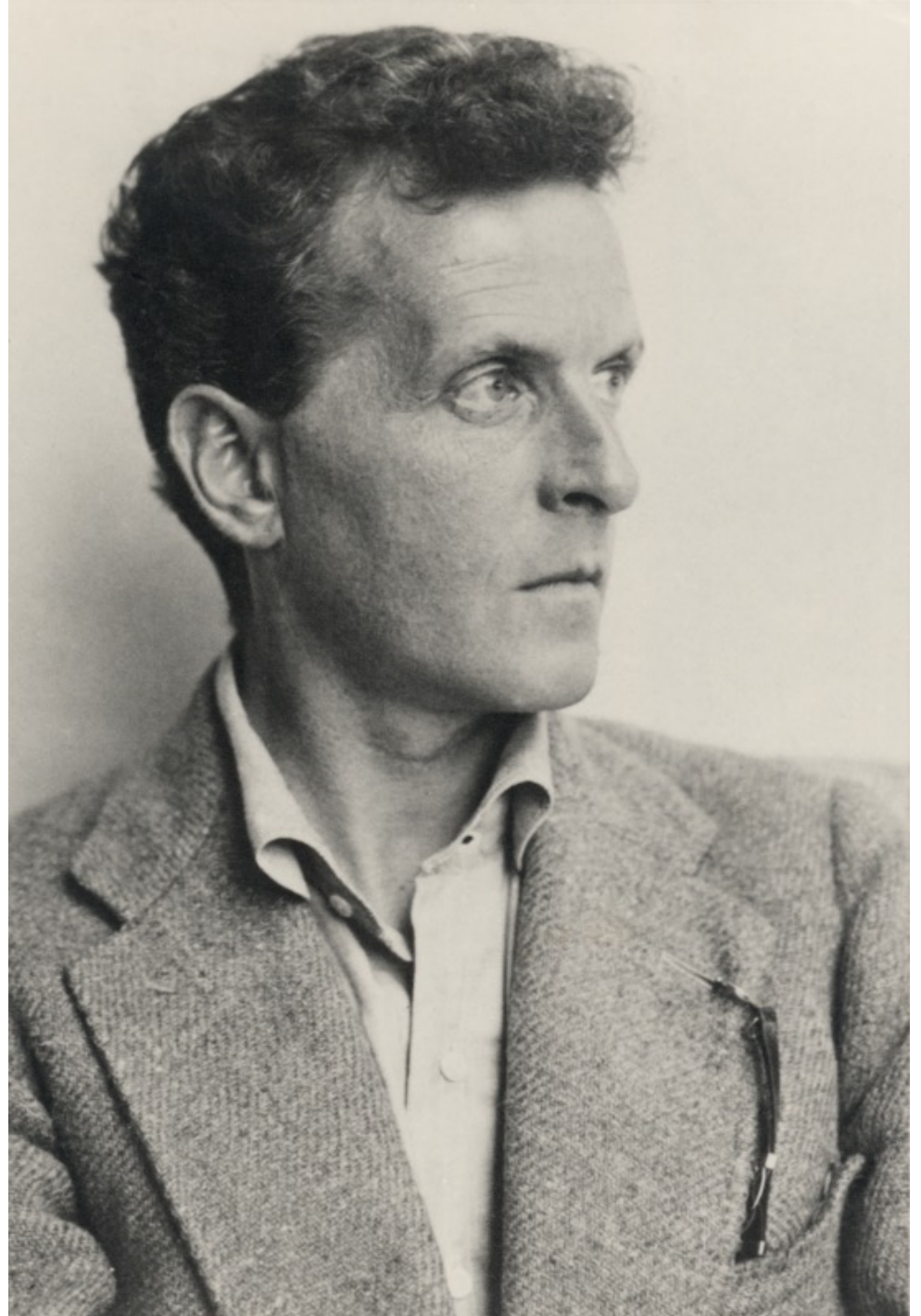
From this proposition it will follow, when arithmetical addition has been defined, that  $1 + 1 = 2$ .

**quanto fa  $1 + 1$  ?**



**Bertrand Russell e Alfred North Whitehead  
completano il loro *Principia Mathematica***

**Ludwig Wittgenstein**  
*Review of Peter  
Coffey's **The Science  
of Logic***

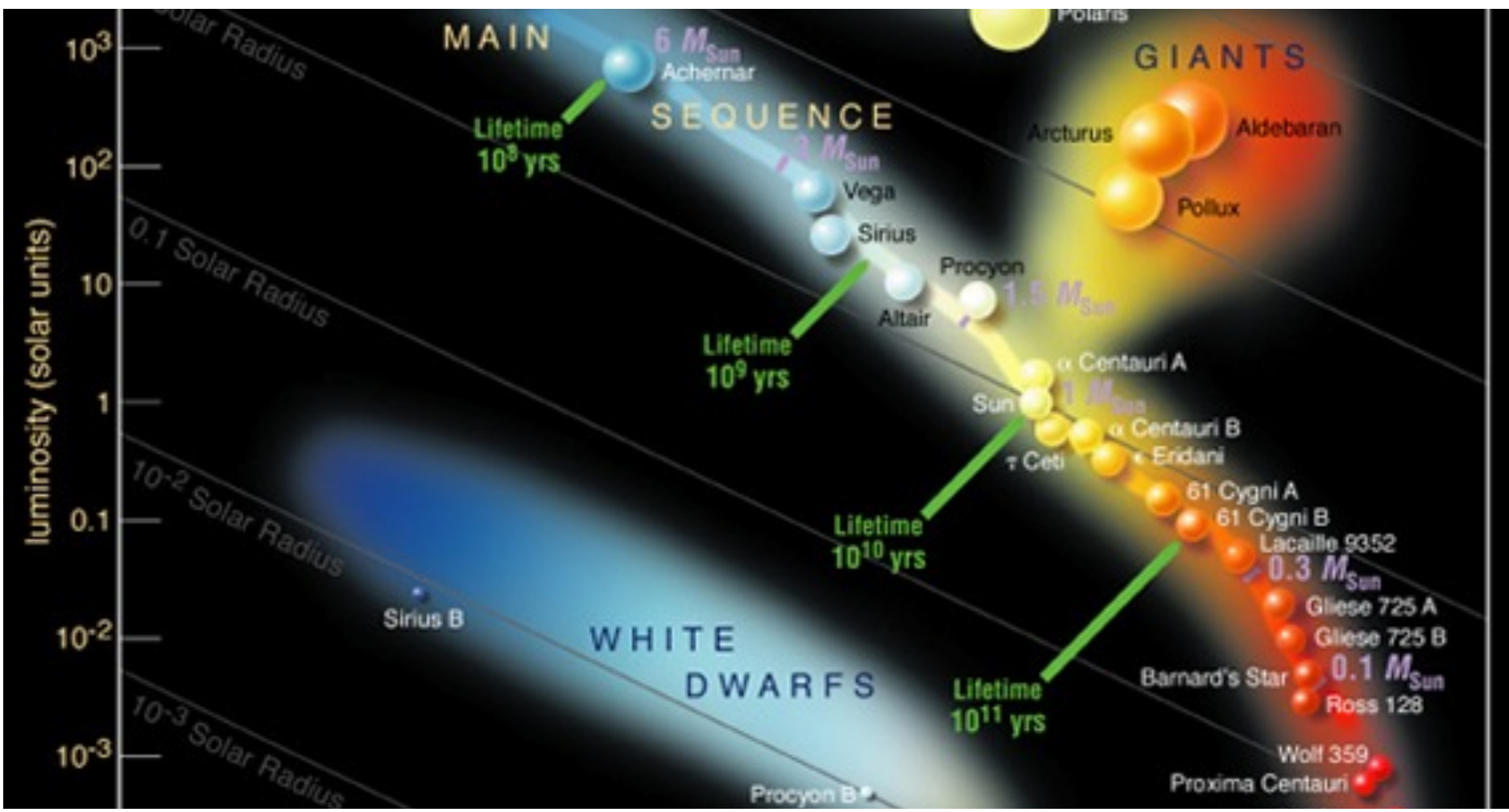




**Émile Borel  
dimostra il  
teorema della  
scimmia infinita  
in *Mécanique  
Statistique et  
Irréversibilité***



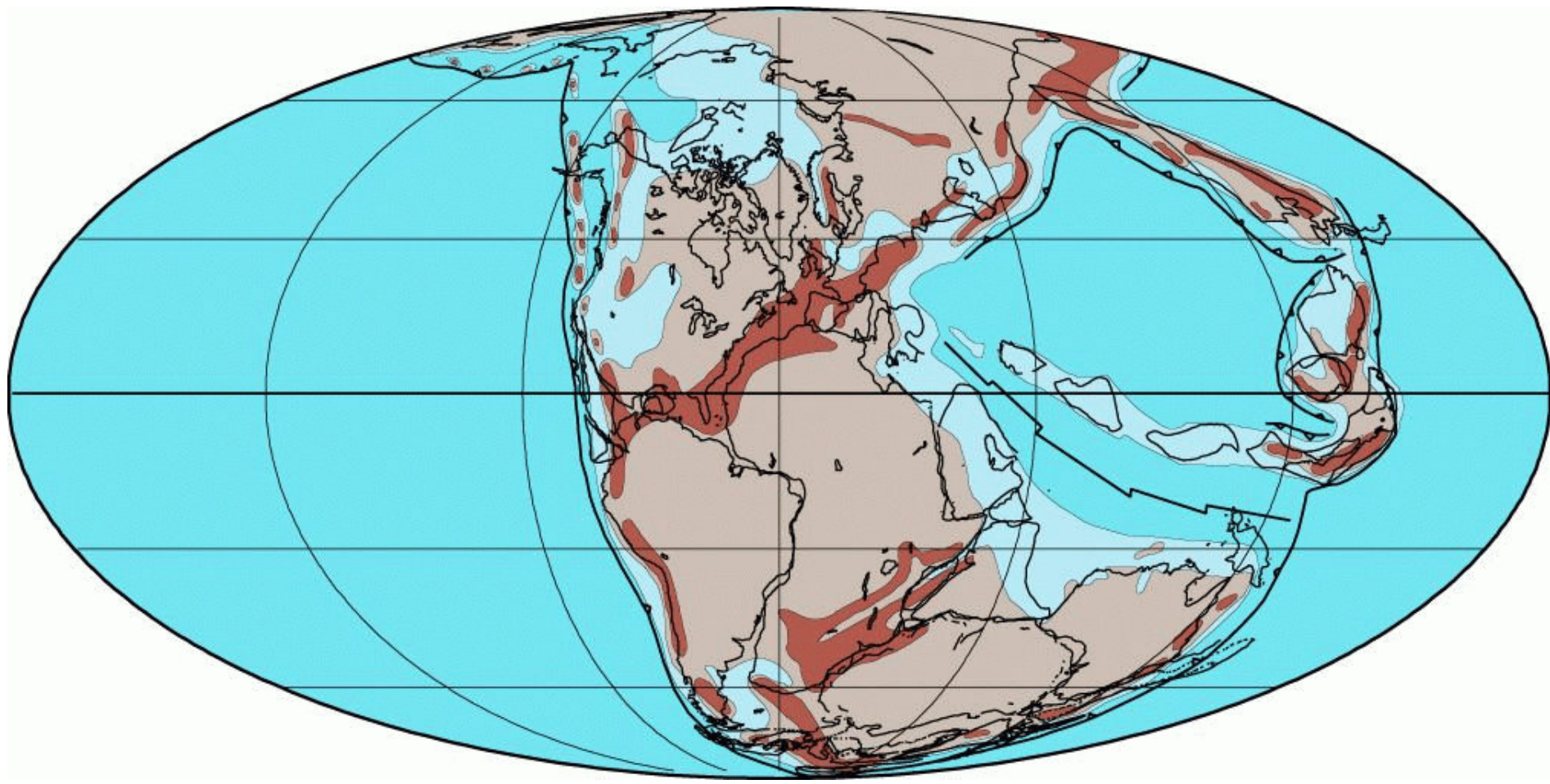






**Henry Norris  
Russell riferisce  
le proprietà  
stellari allo  
spettro della  
luce emessa**

**diagramma di  
Hertzsprung-  
Russell**



**Alfred  
Wegener  
propone la  
teoria della  
deriva dei  
continenti**





# Charles Fabry e Henri Buisson scoprono lo strato di ozono

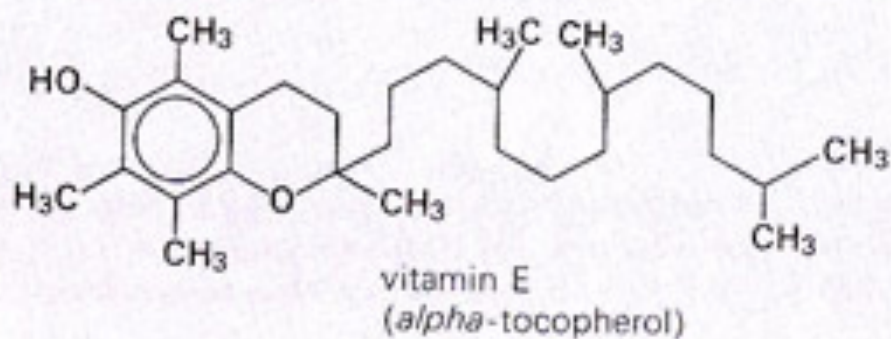
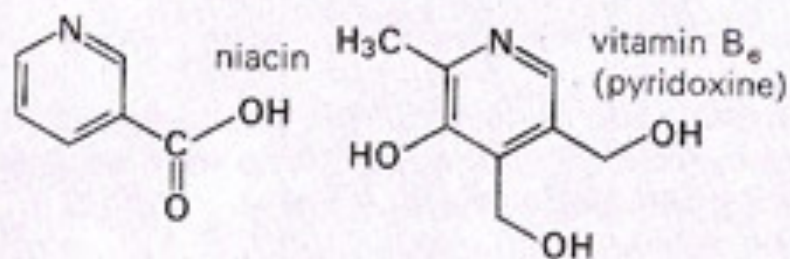
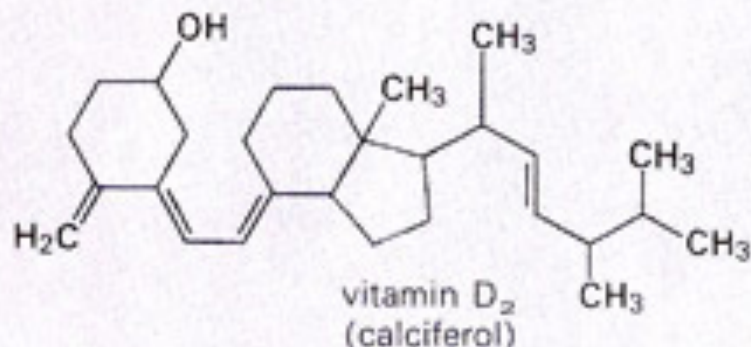
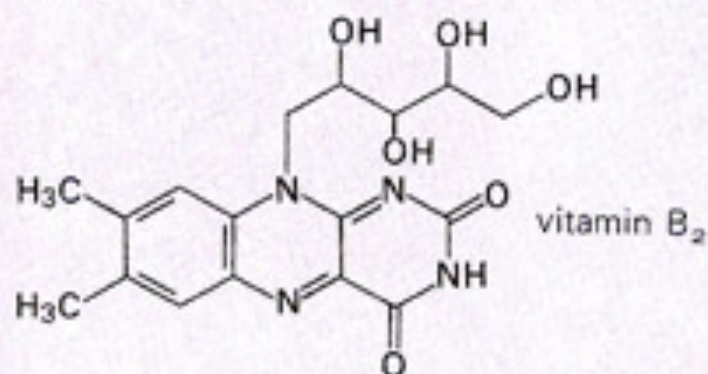
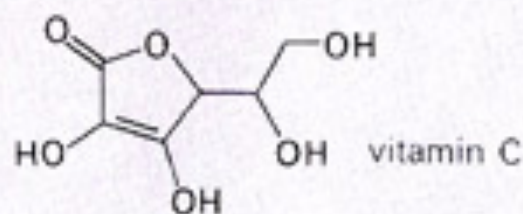
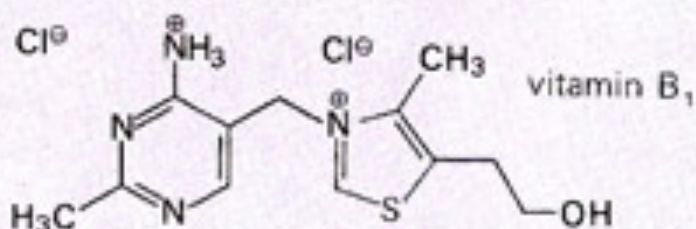
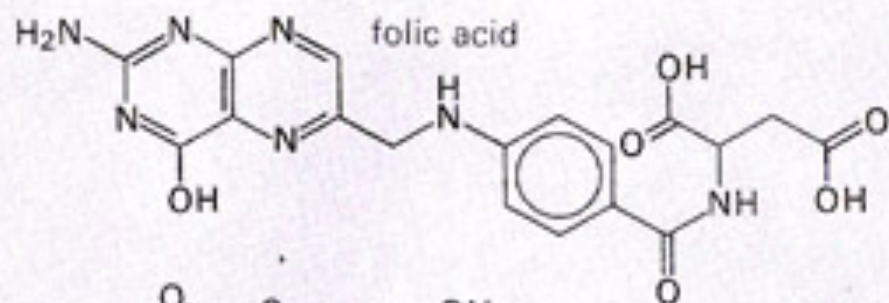
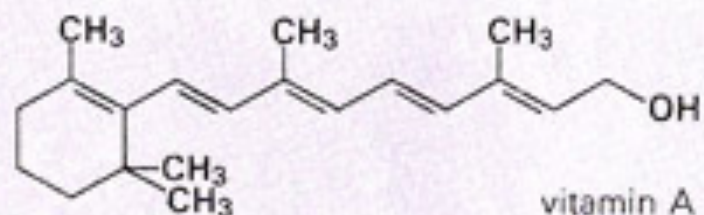




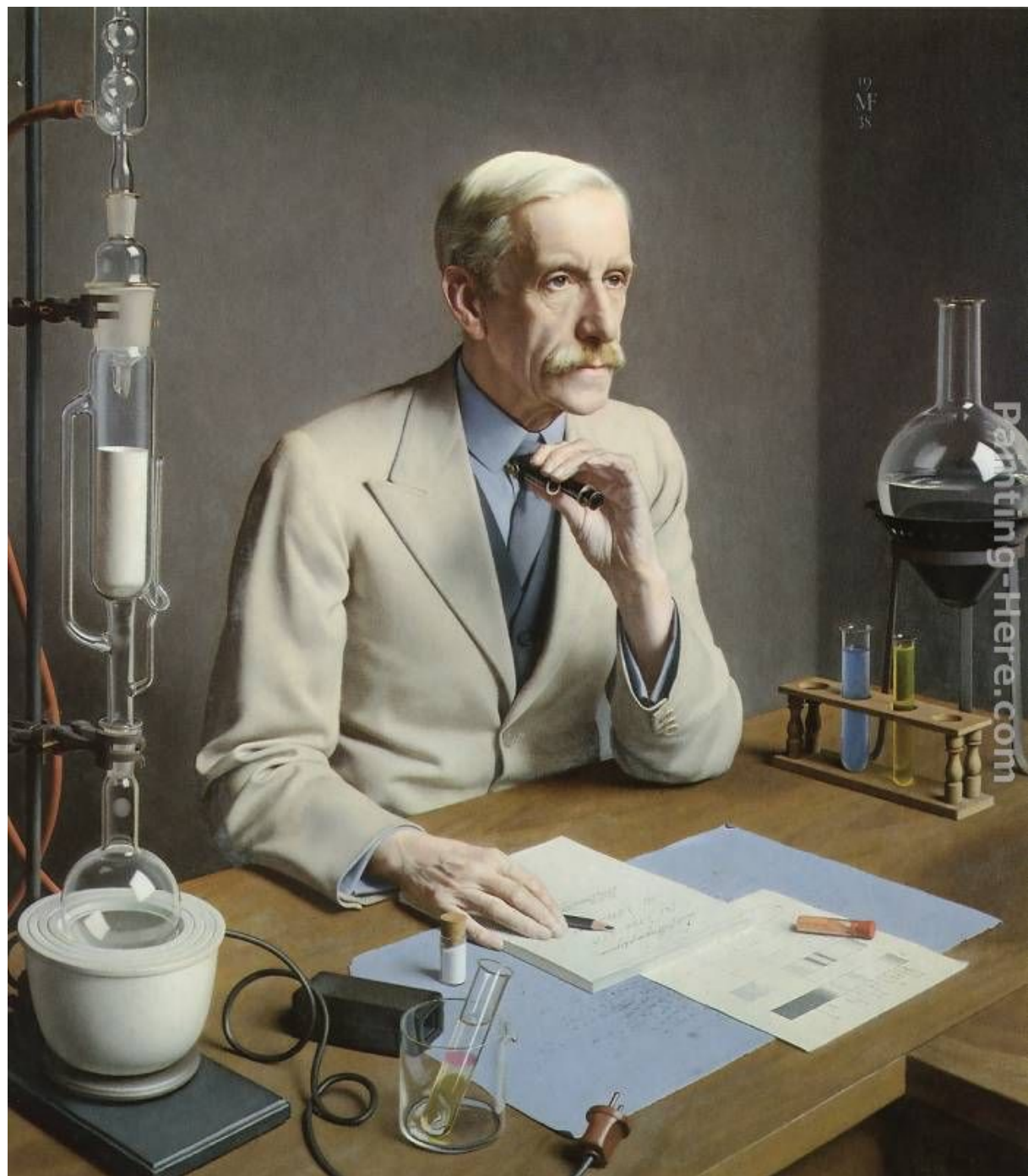


**Albert Abraham Michelson e Henry Gordon Gale osservano le maree terrestri**



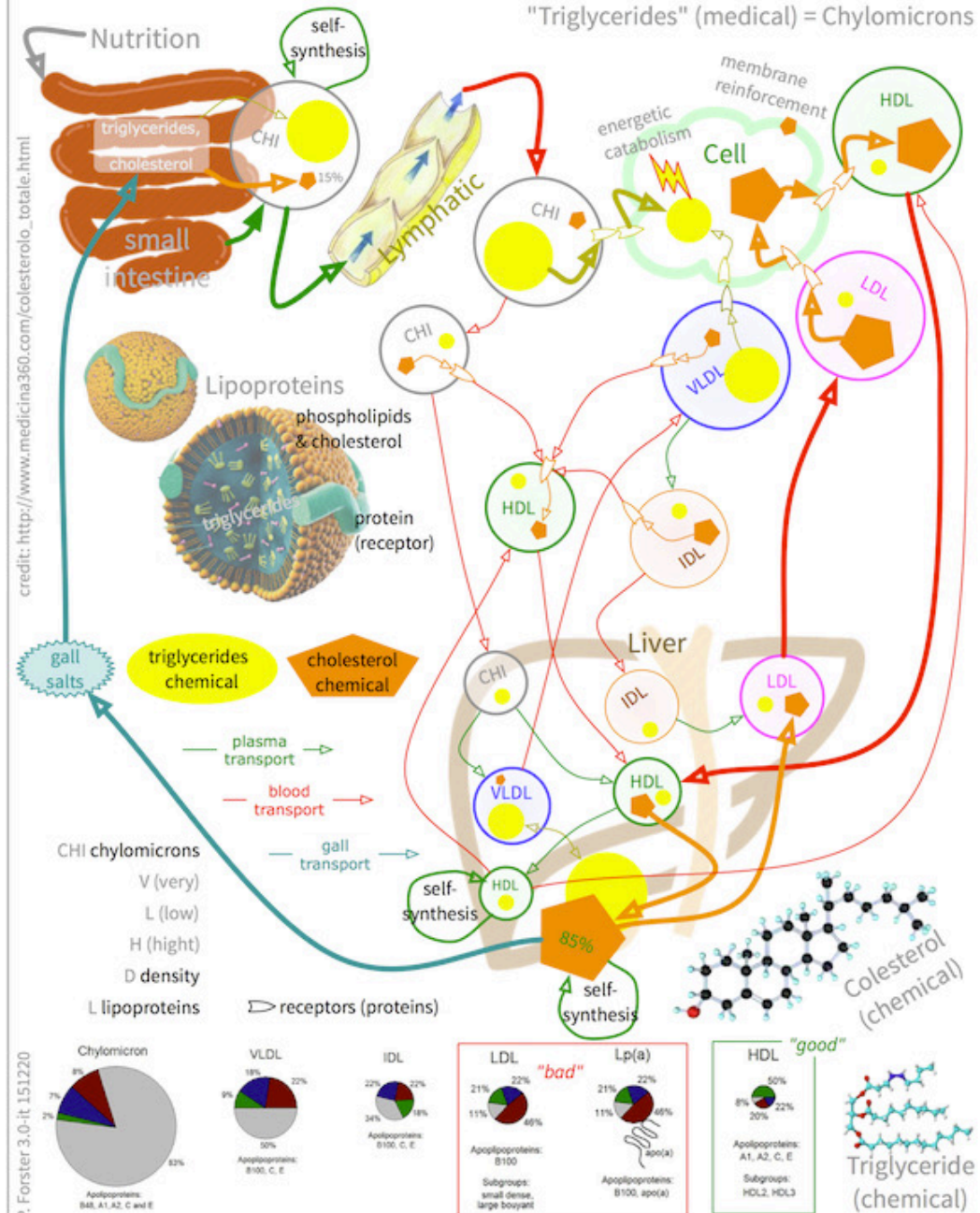


**Frederick  
Gowland  
Hopkins  
caratterizza le  
vitamine**



# Lipidomics

total "Cholesterol" (medical) = HDL + LDL + VLDL  
 "Triglycerides" (medical) = Chylomicrons

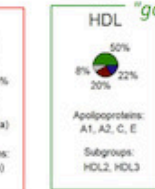
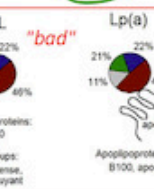
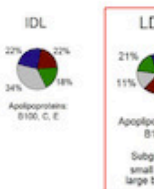
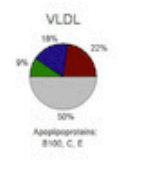
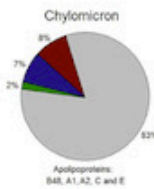


credit: [http://www.medicina360.com/colesterolo\\_totale.html](http://www.medicina360.com/colesterolo_totale.html)

Cc by P. Forster 3.0-it 151220

CHI chylomicrons  
 V (very)  
 L (low)  
 H (high)  
 D density  
 L lipoproteins

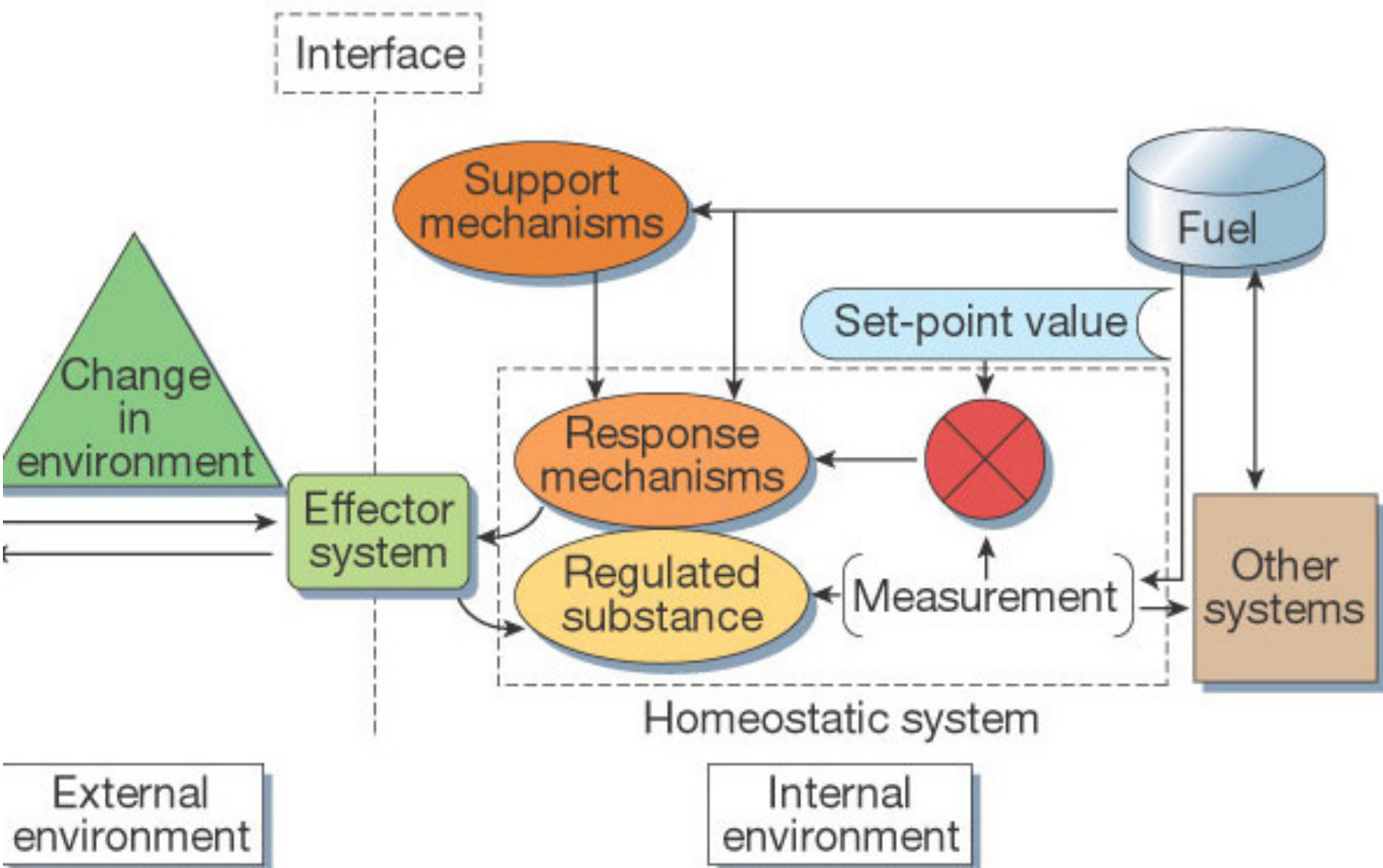
▷ receptors (proteins)



■ Cholesterol ■ Protein ■ Phospholipids ■ Triglycerides

**Nikolay  
Nikolayevich  
Anichov  
dimostra il ruolo  
del colesterolo  
nella patogenesi  
dell'arteriosclerosi**

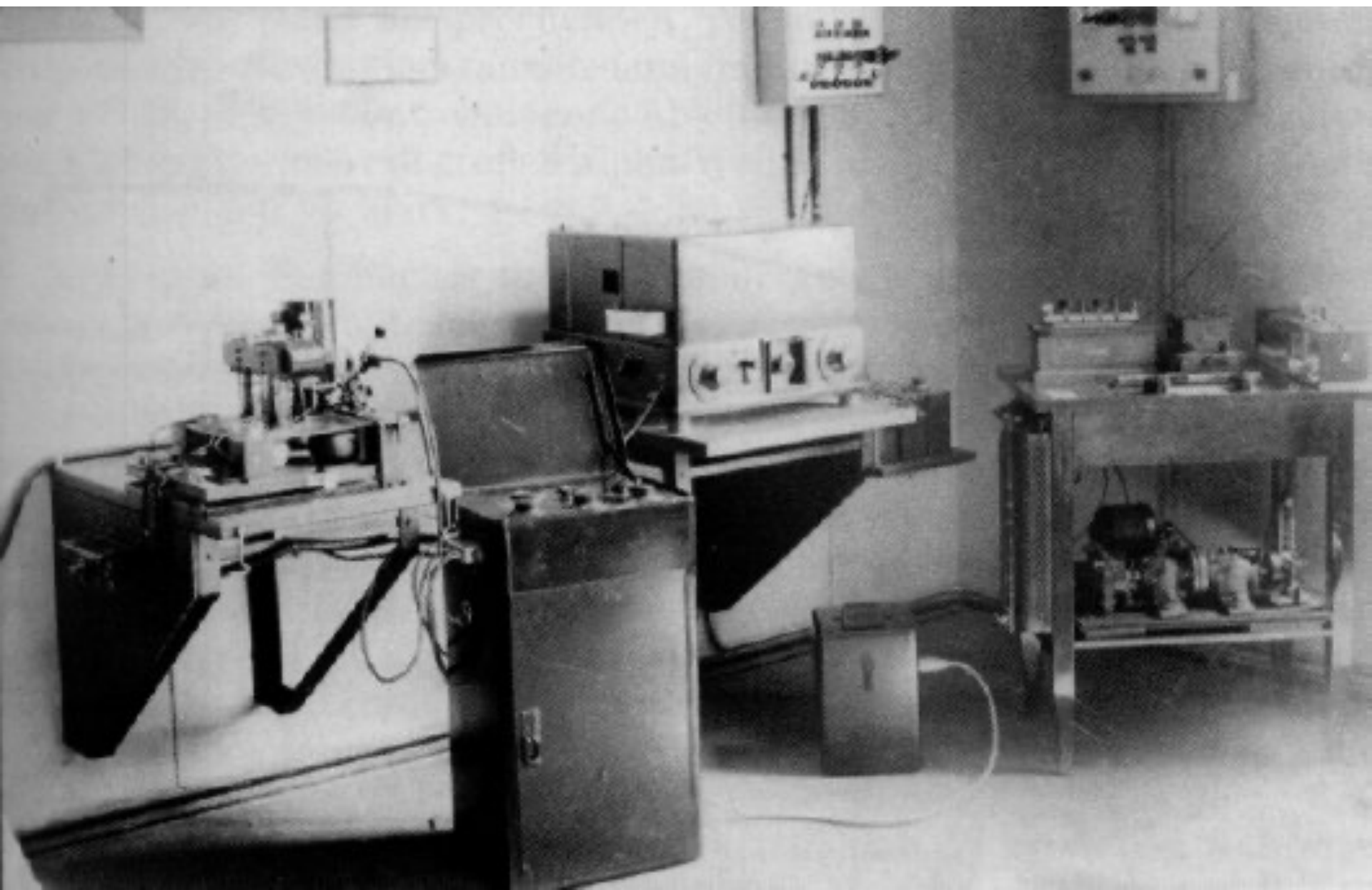




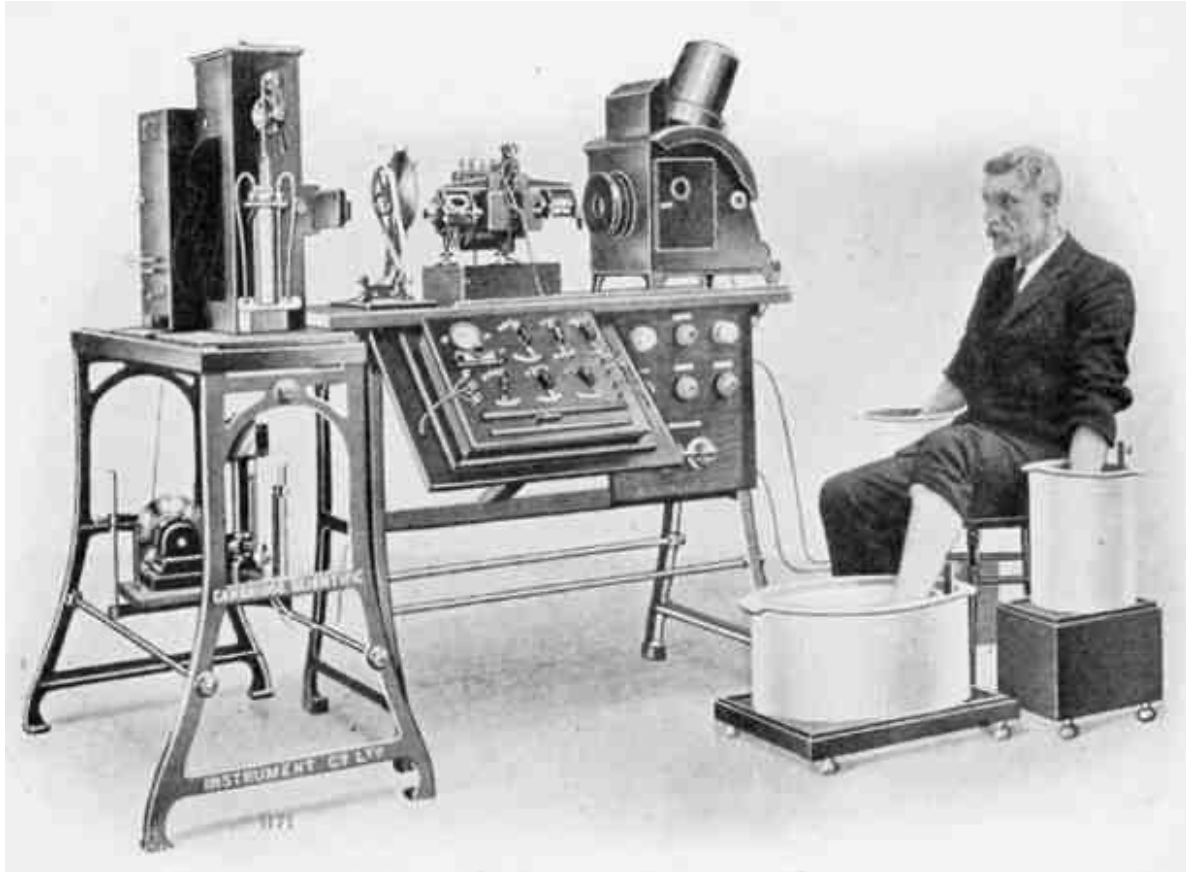
**Lawrence J. Henderson:**  
**la vita è un processo di**  
**controllo e di**  
**compensazione dei**  
**parametri chimico-fisici**  
**dell'ambiente cellulare**  
**(*The Fitness of the***  
***Environment*)**











**Vladimir Pravdich-Neminsky osserva il potenziale elettrico del cervello e isola le onde alfa e beta**

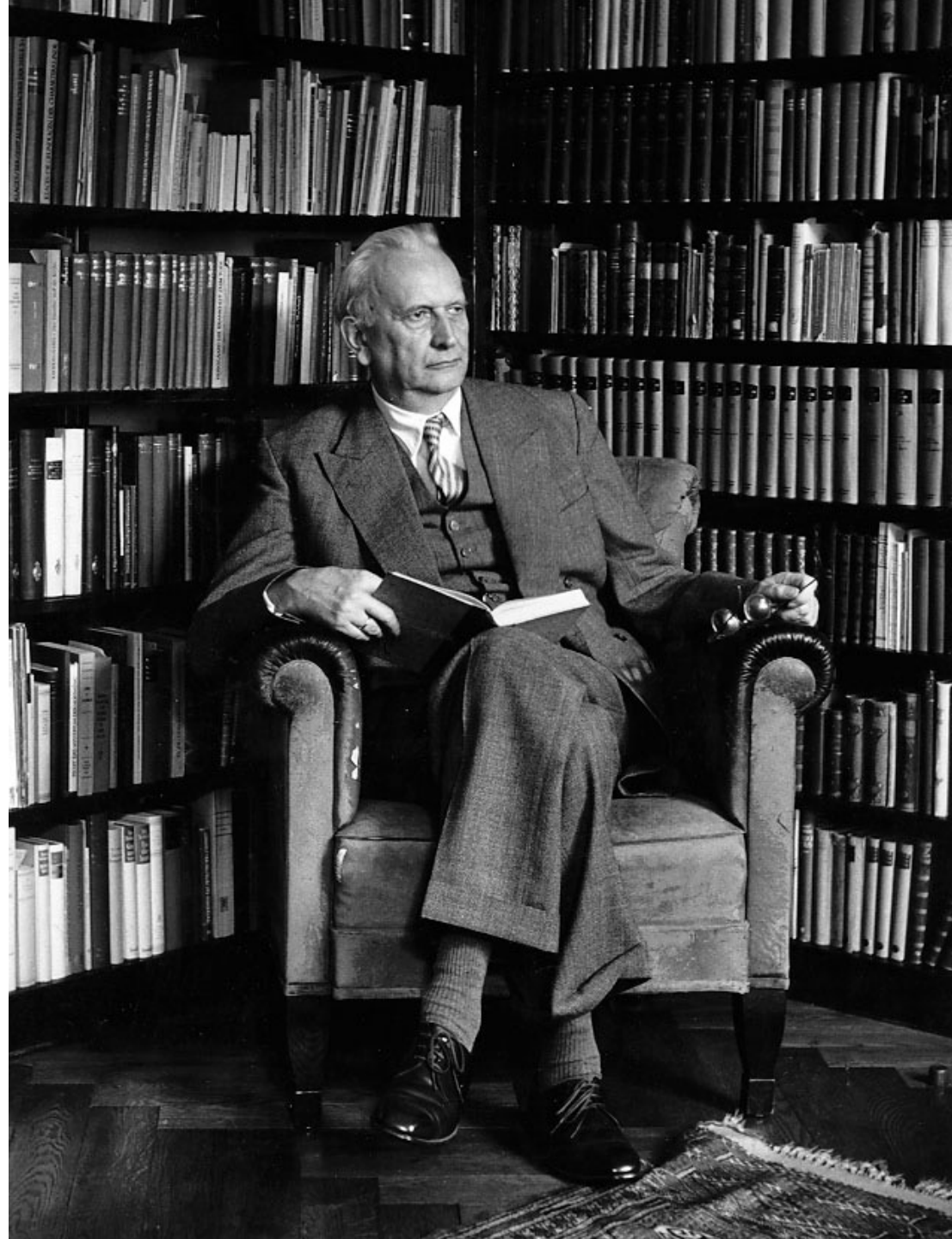


**Esperimenti sul comportamento di infanti**

**John Broadus Watson**  
*Psychology as the  
Behaviorist views it*







**Karl Jaspers  
analizza la natura  
della malattia  
mentale in  
*Allgemeine  
Psychopathologie***

*fil rouge 4*

**scoperte e innovazioni scientifiche  
nel 1913**

❖ **uno sguardo alla scienza coeva**

*titolo*

**1913 il nuovo irrompe nella scienza**

**approccio sincronico esteso**

**è successo qualcos'altro di  
fondamentale nel 1913 al di fuori  
della scienza?**

**in fondo è l'anno dell'“azione parallela”...**

**è possibile un *fil rouge* 5?**



**Neus Rathaus, Hannover**





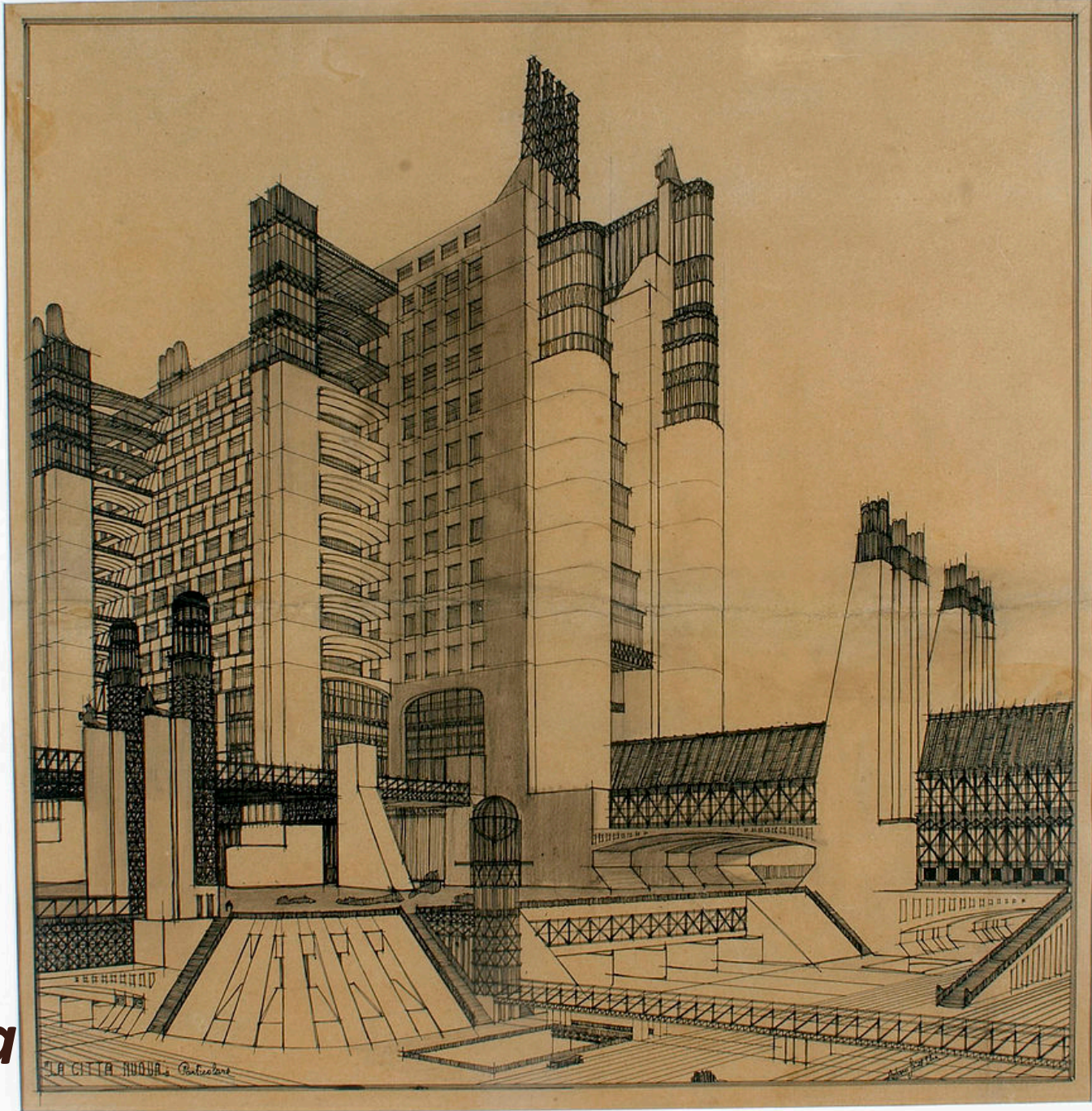
**J. Bolliger & Co: Halenbrücke, Berna,  
in cemento di alta qualità rinforzato solo  
leggermente**

# Woolworth Building, Manhattan



**Cass Gilbert  
sviluppa la tecnica  
del cemento  
armato**

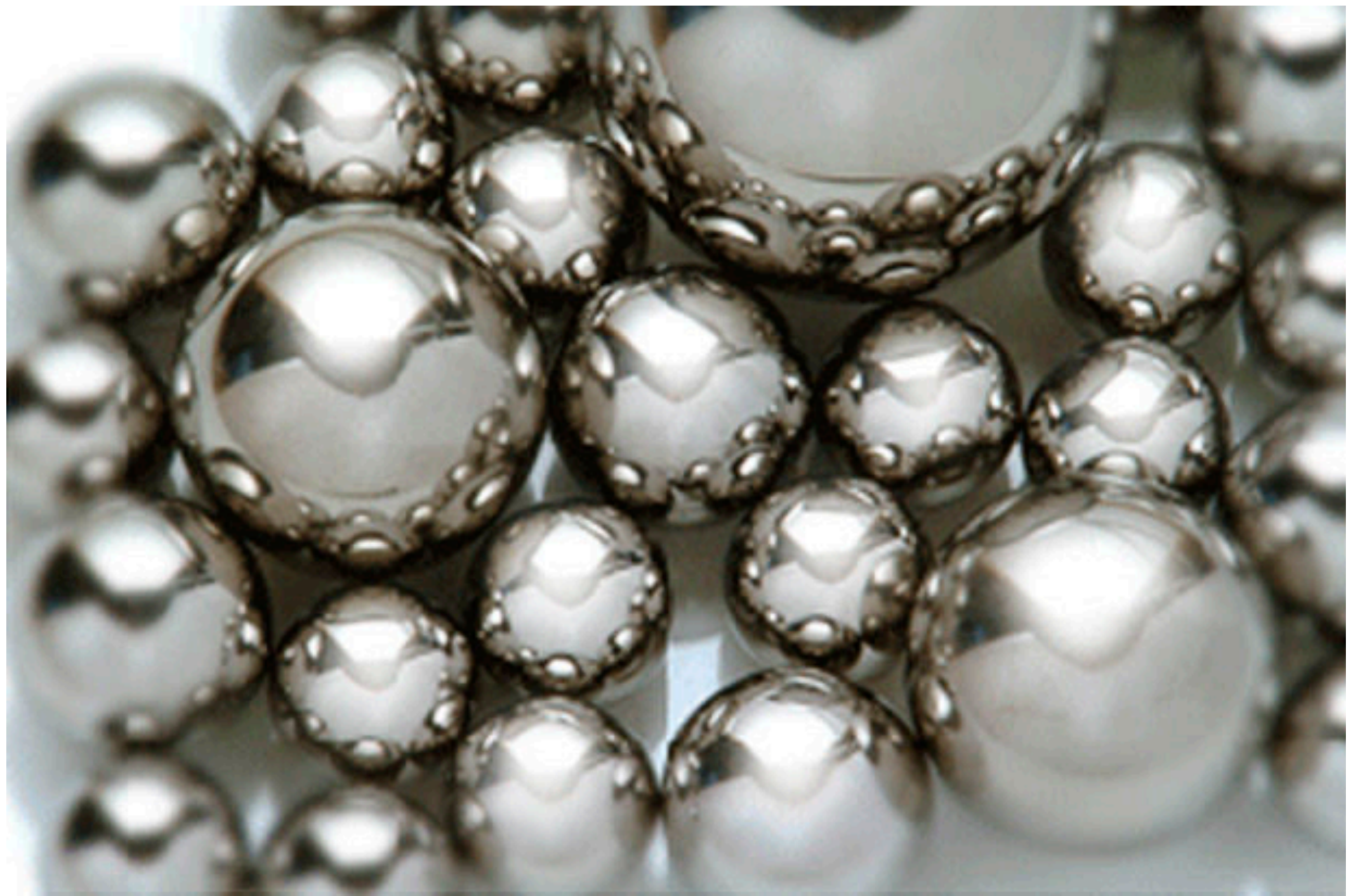




*Casa futurista*



**Antonio Sant'Elia**



**Harry Brearley  
inventa l'acciaio  
inossidabile**



# Daniel J. O'Connor e Herbert A. Faber





It's easier than you think to have  
your 'FORMICA' dream kitchen!



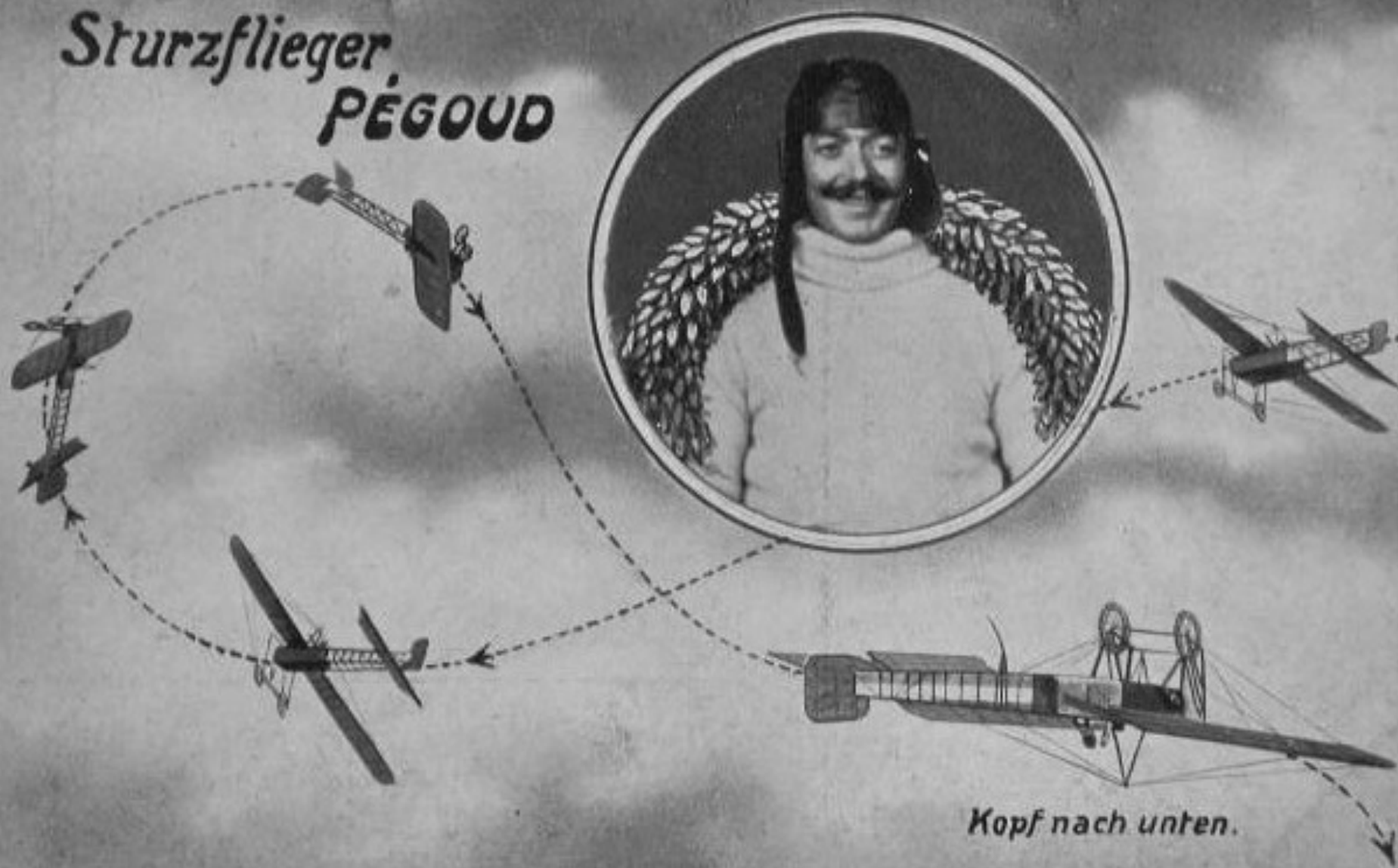
inventano la formica



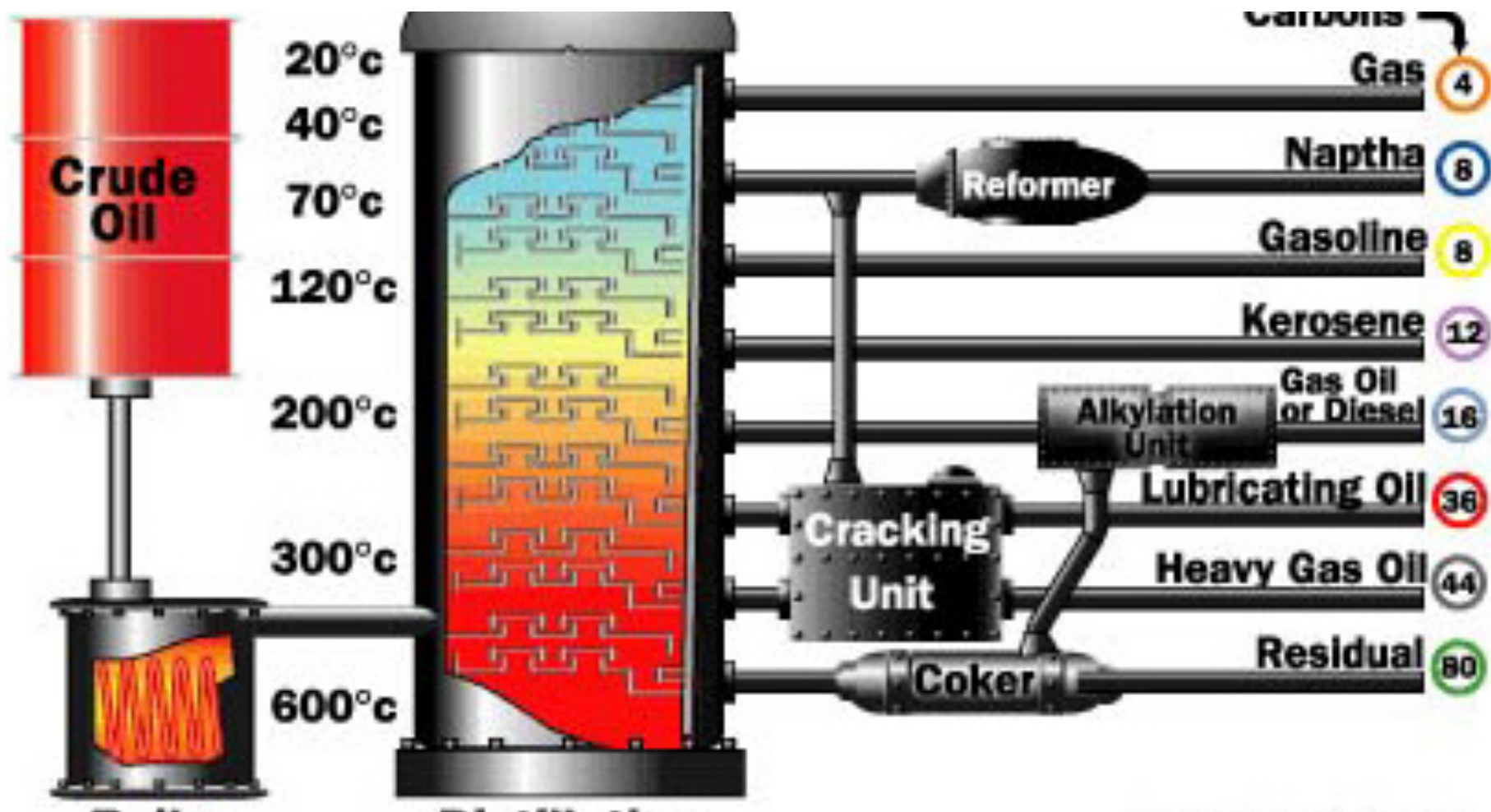


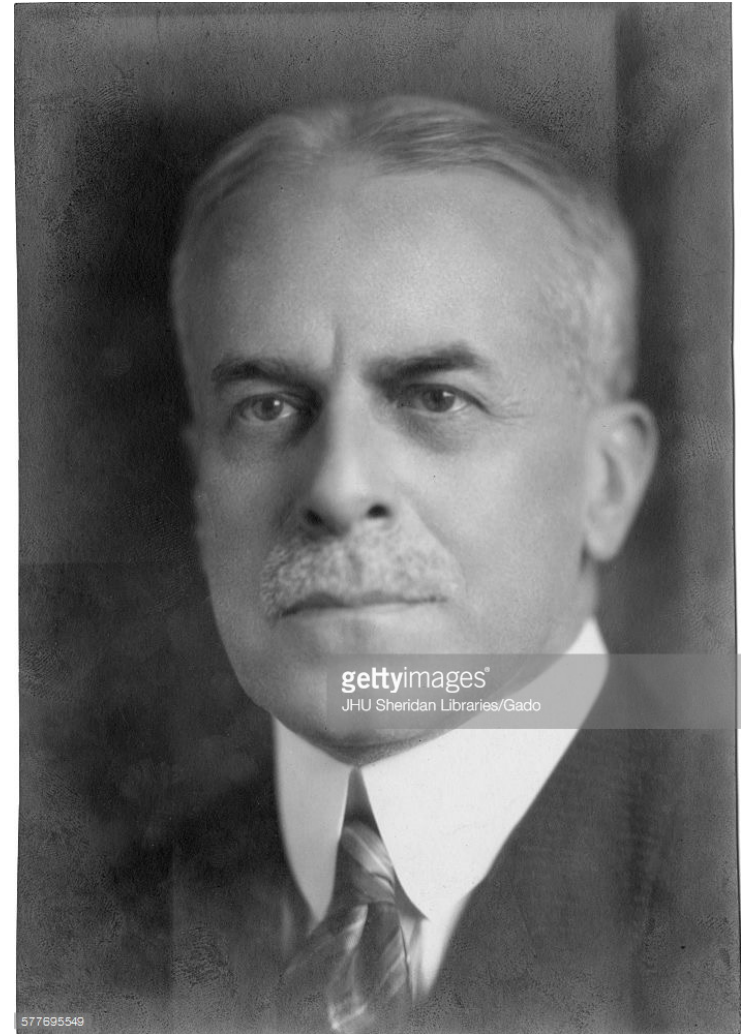
**Igor Sikorsky inaugura il volo commerciale:  
8 passeggeri sul primo quadrimotore**

Sturzflieger.  
PÉGOUD



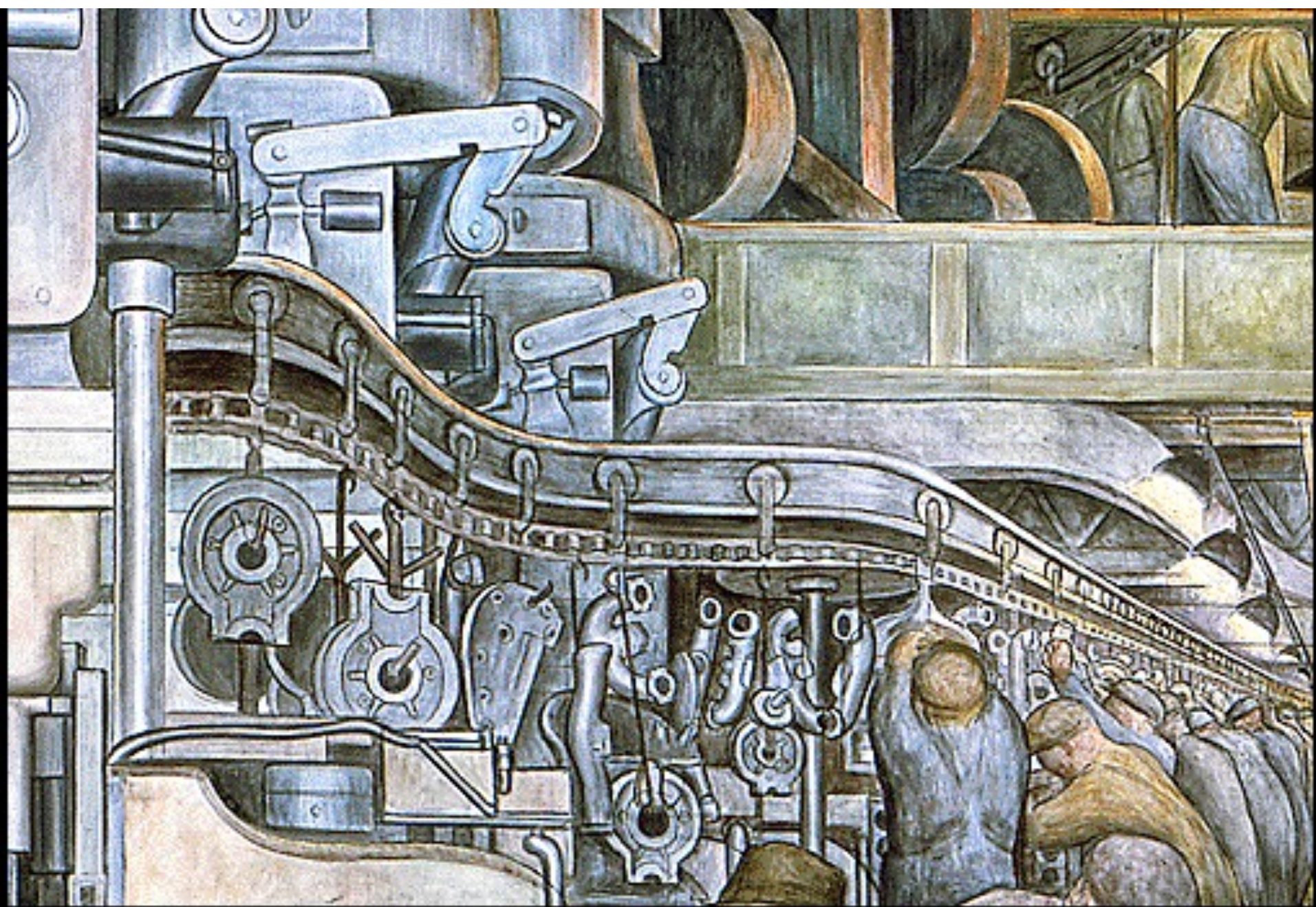
**Adolphe Pégoud è il primo pilota a lanciarsi col paracadute da un aereo in avaria (20 agosto)**





**William Merriam Burton brevetta il cracking del petrolio**

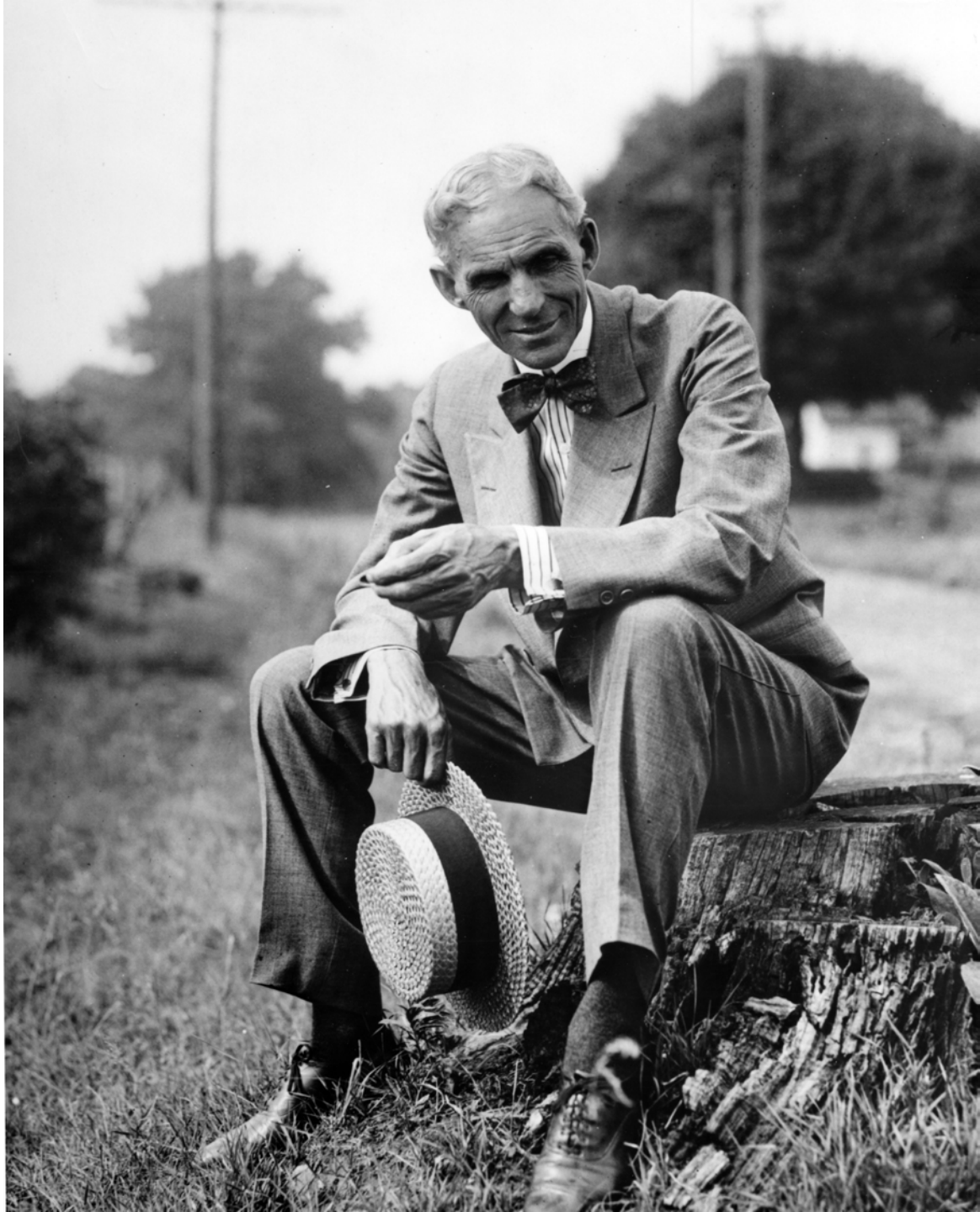






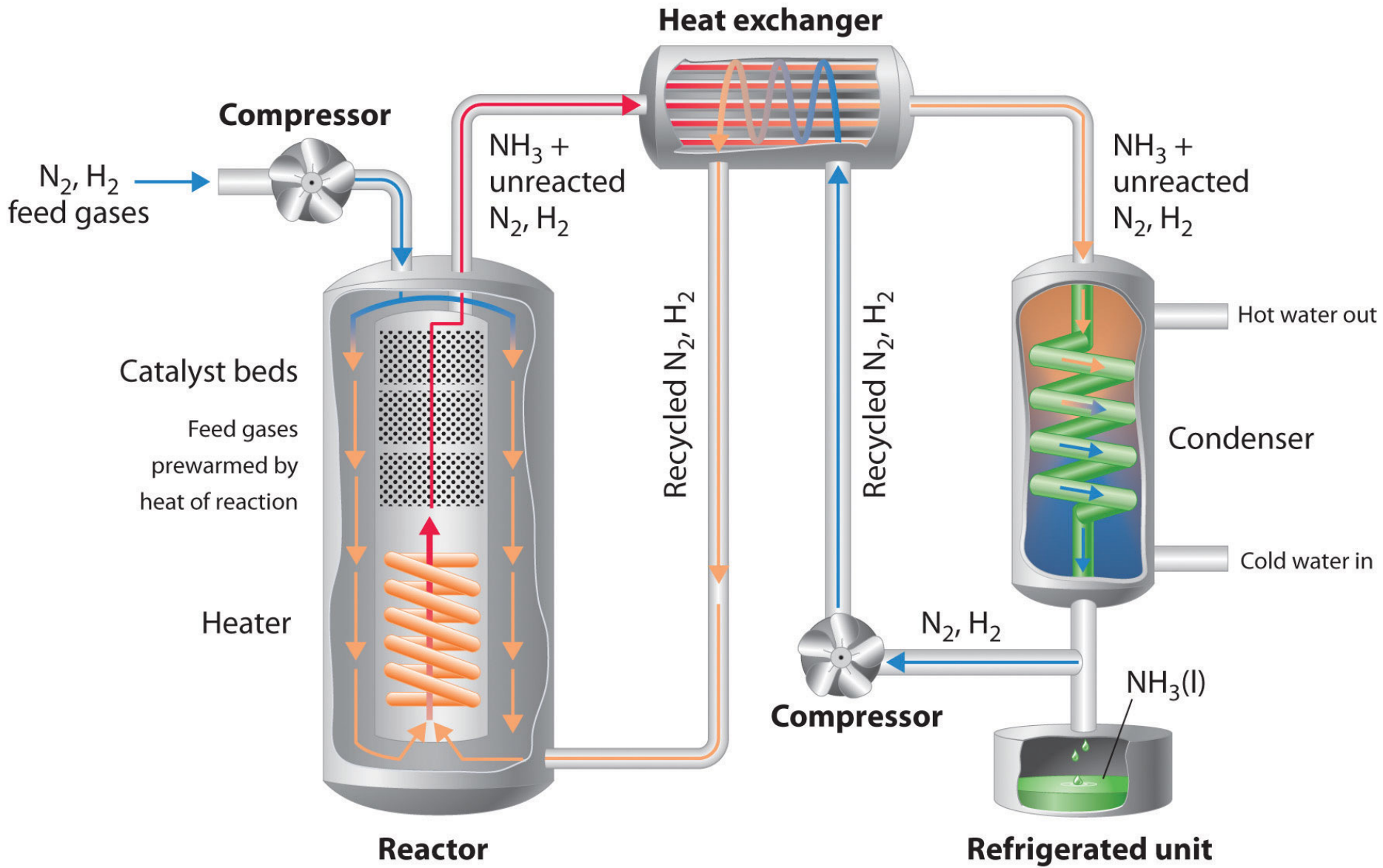


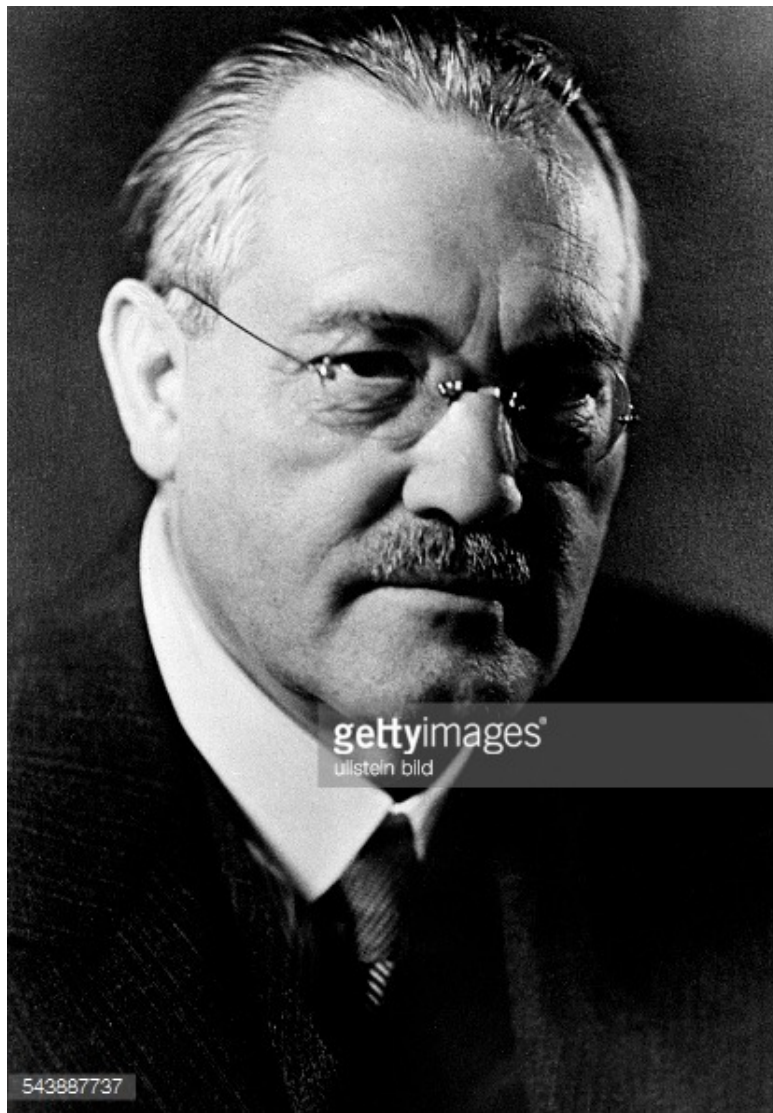
**Henry Ford  
introduce a  
Detroit la catena  
di montaggio per  
la produzione di  
massa**





**la Ford T, la prima “utilitaria” rende l’auto  
accessibile alla classe media americana**



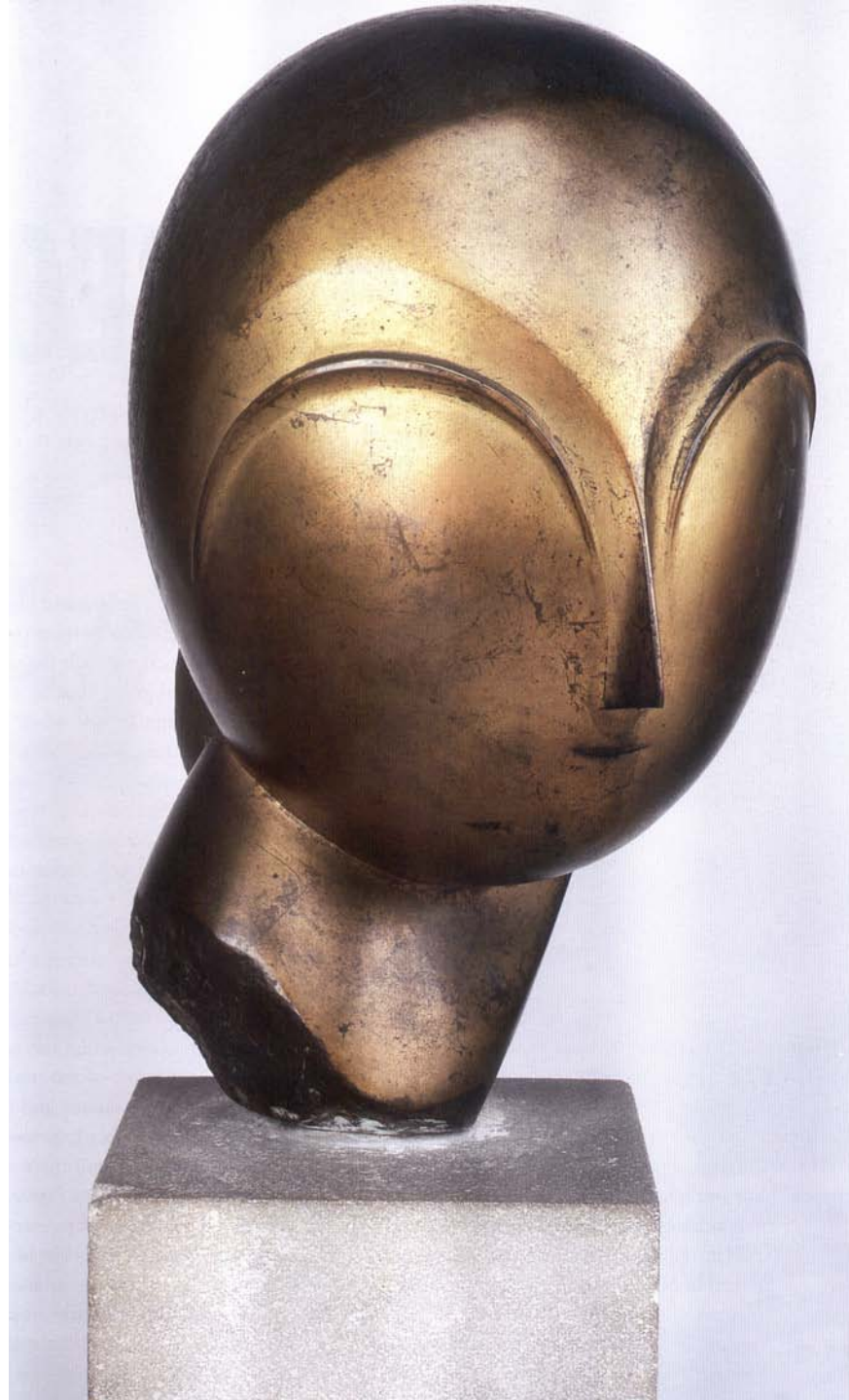


**la BASF inizia la produzione di fertilizzanti basati sul processo di Fritz Haber – Carl Bosch fondamentale per la produzione agricola**

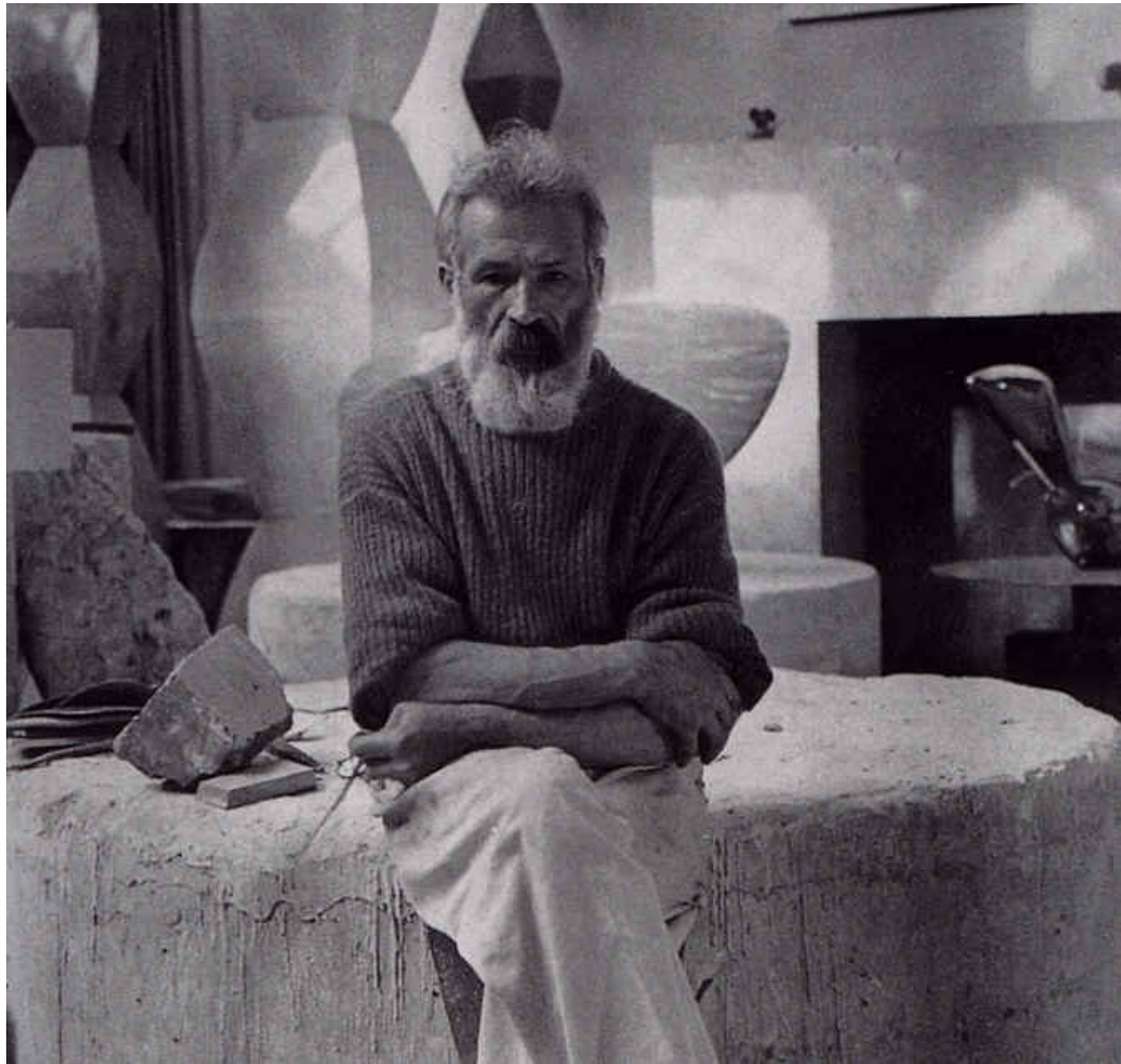


**Carl Jacobsen sovrintende alla costruzione de  
“la sirenetta” a Copenhagen**

**Danaide**



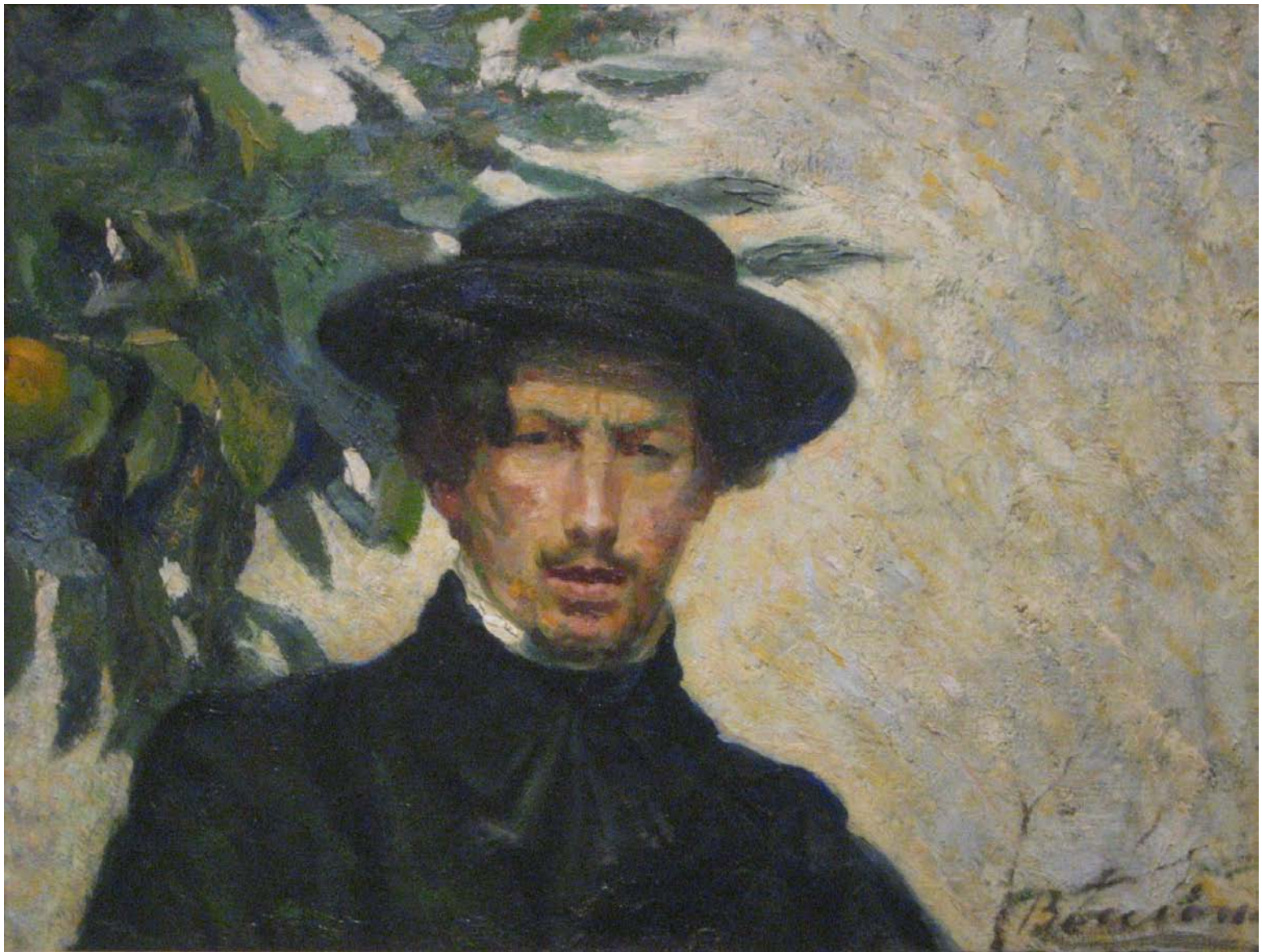
**Constantin  
Brancusi  
Parigi**





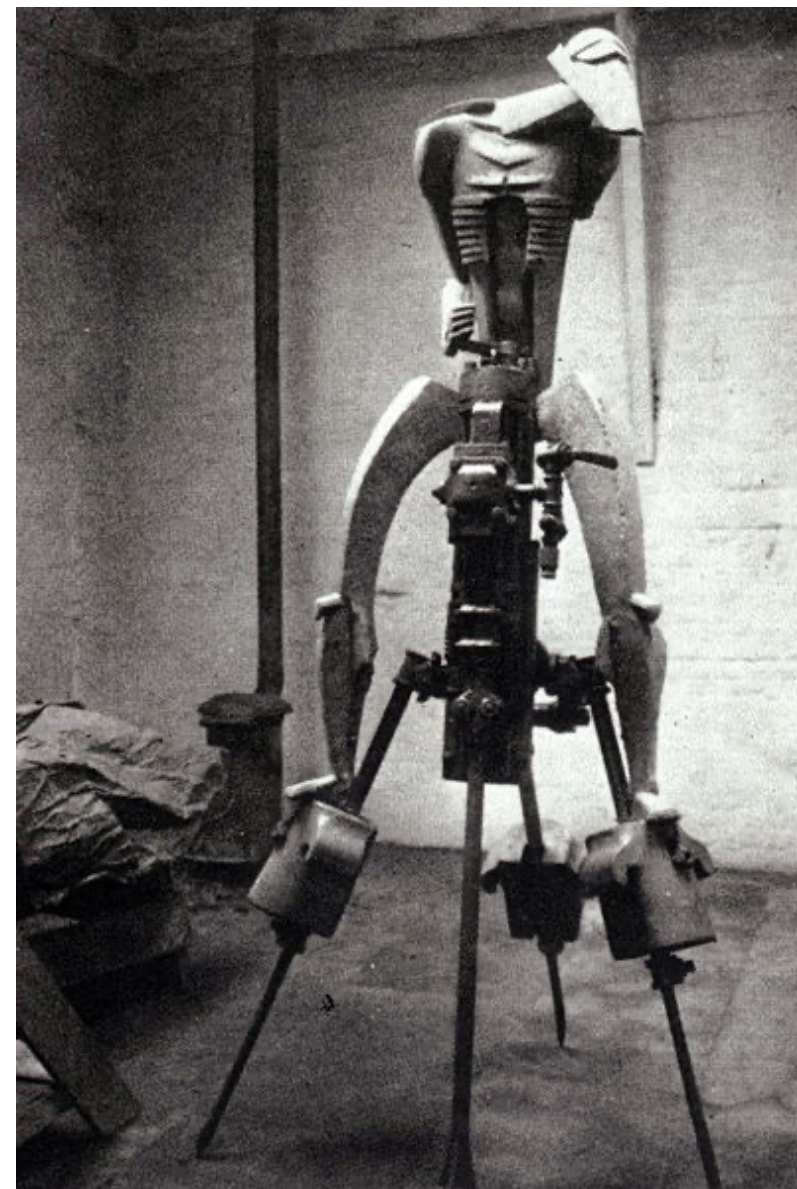
**Forme uniche della  
continuità nello  
spazio**





**Umberto Boccioni:**

***(Manifesto tecnico della scultura futurista)***



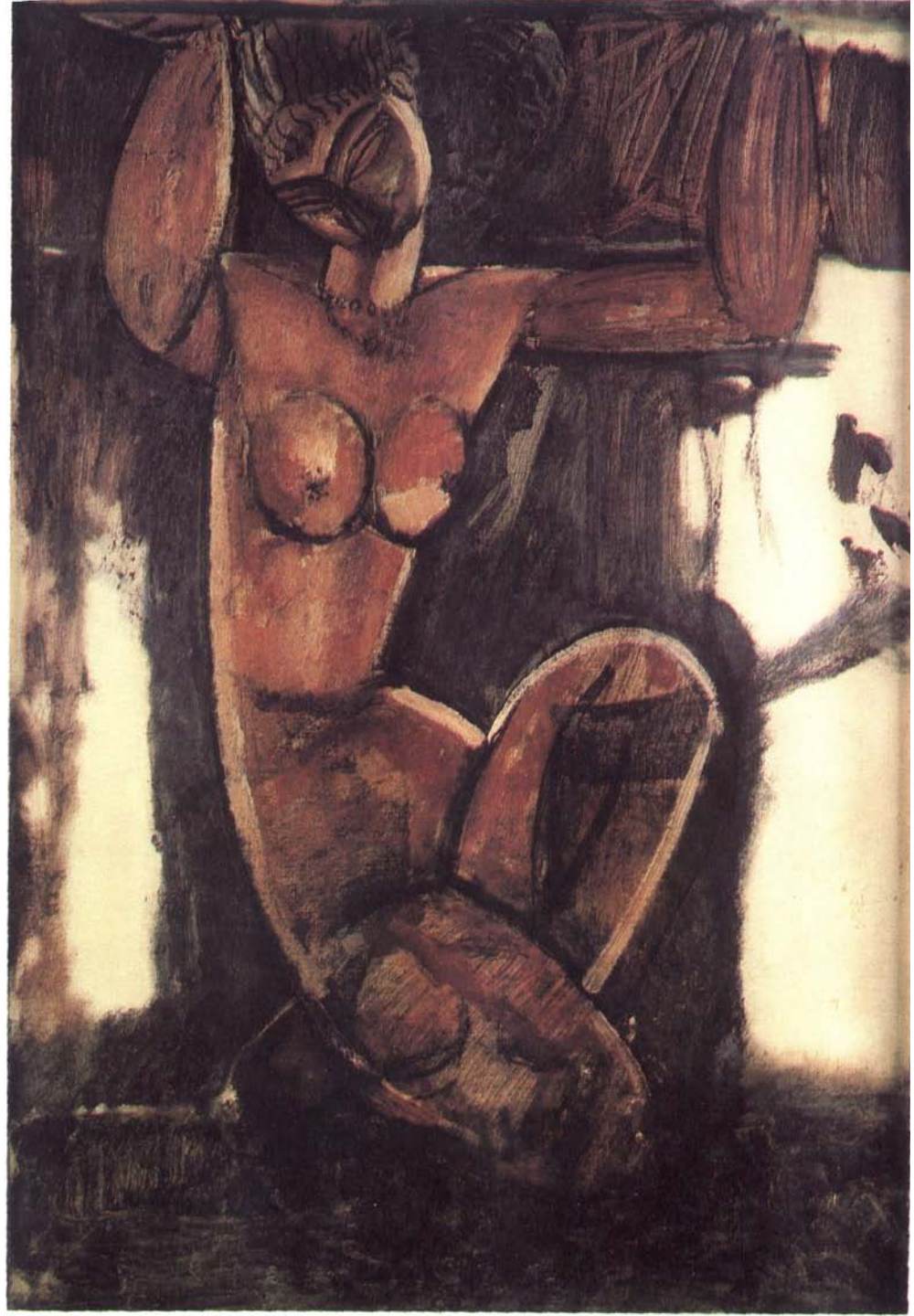
**Rock Drill, torso**

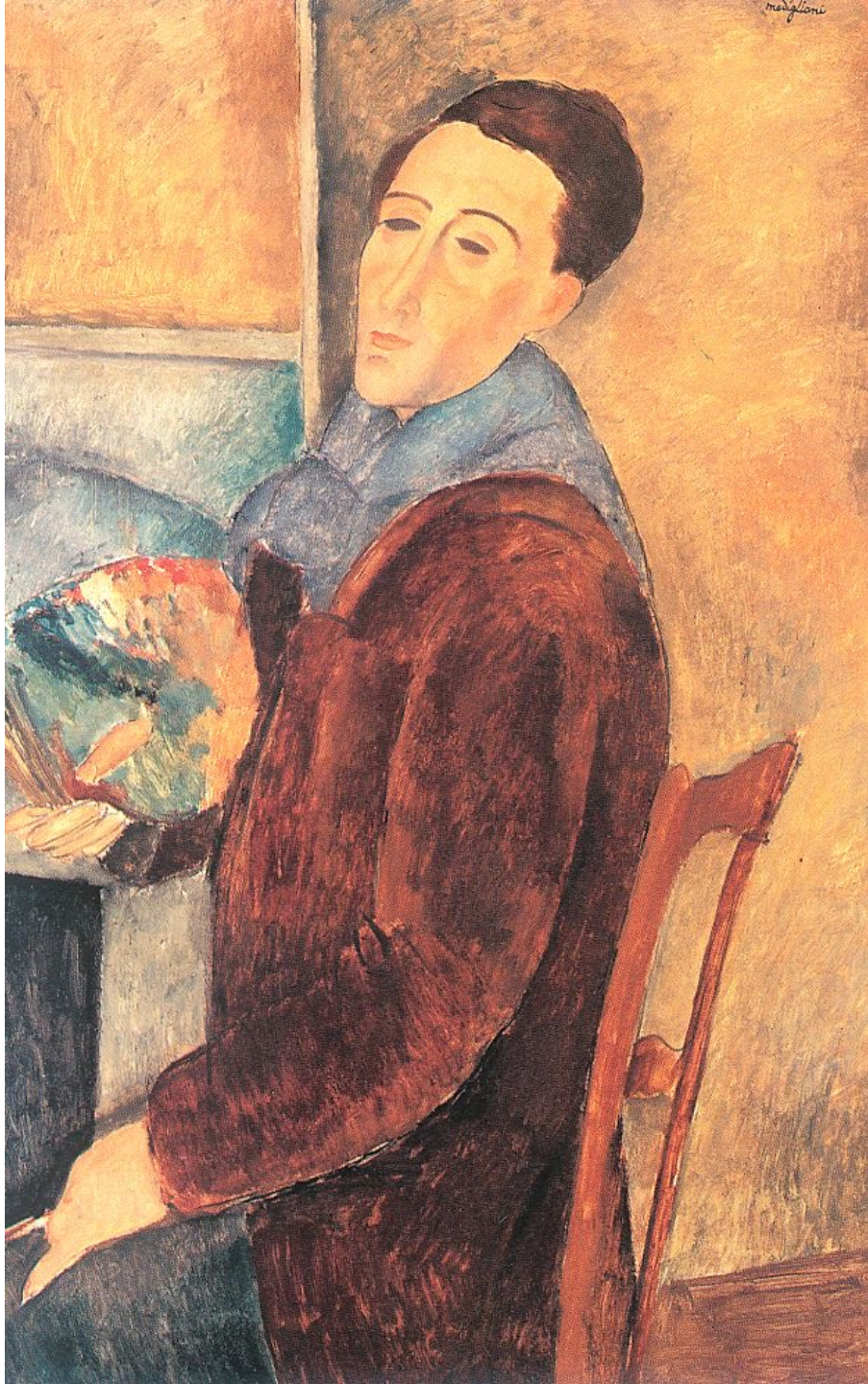


**Jacob Epstein  
Loughton, UK  
“vorticism”**



**cariatide**





**Amedeo  
Modigliani  
Parigi**

**coppia di  
amanti**



**Marc  
Chagall  
inizia a  
lavorare a  
Parigi**

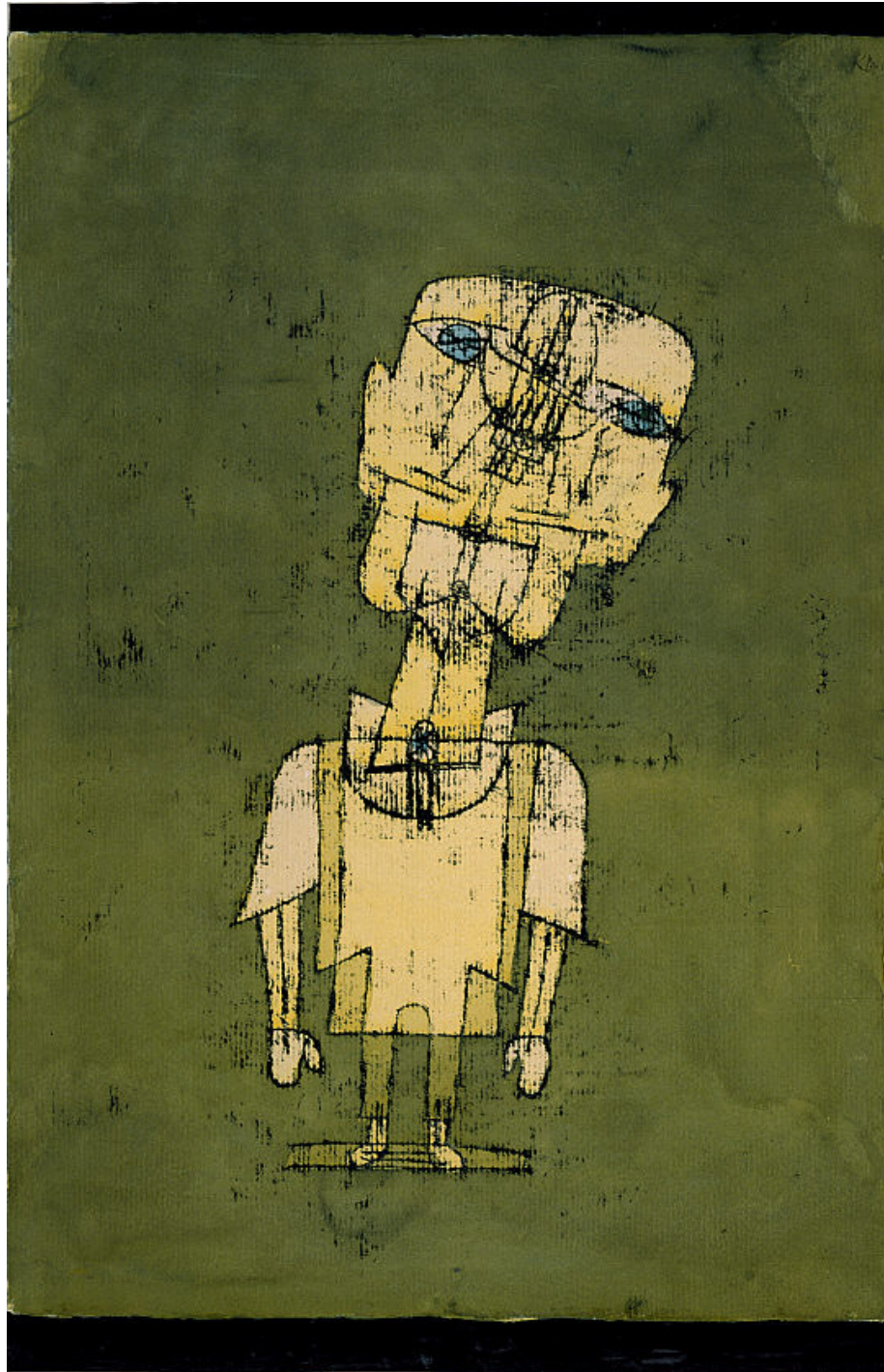


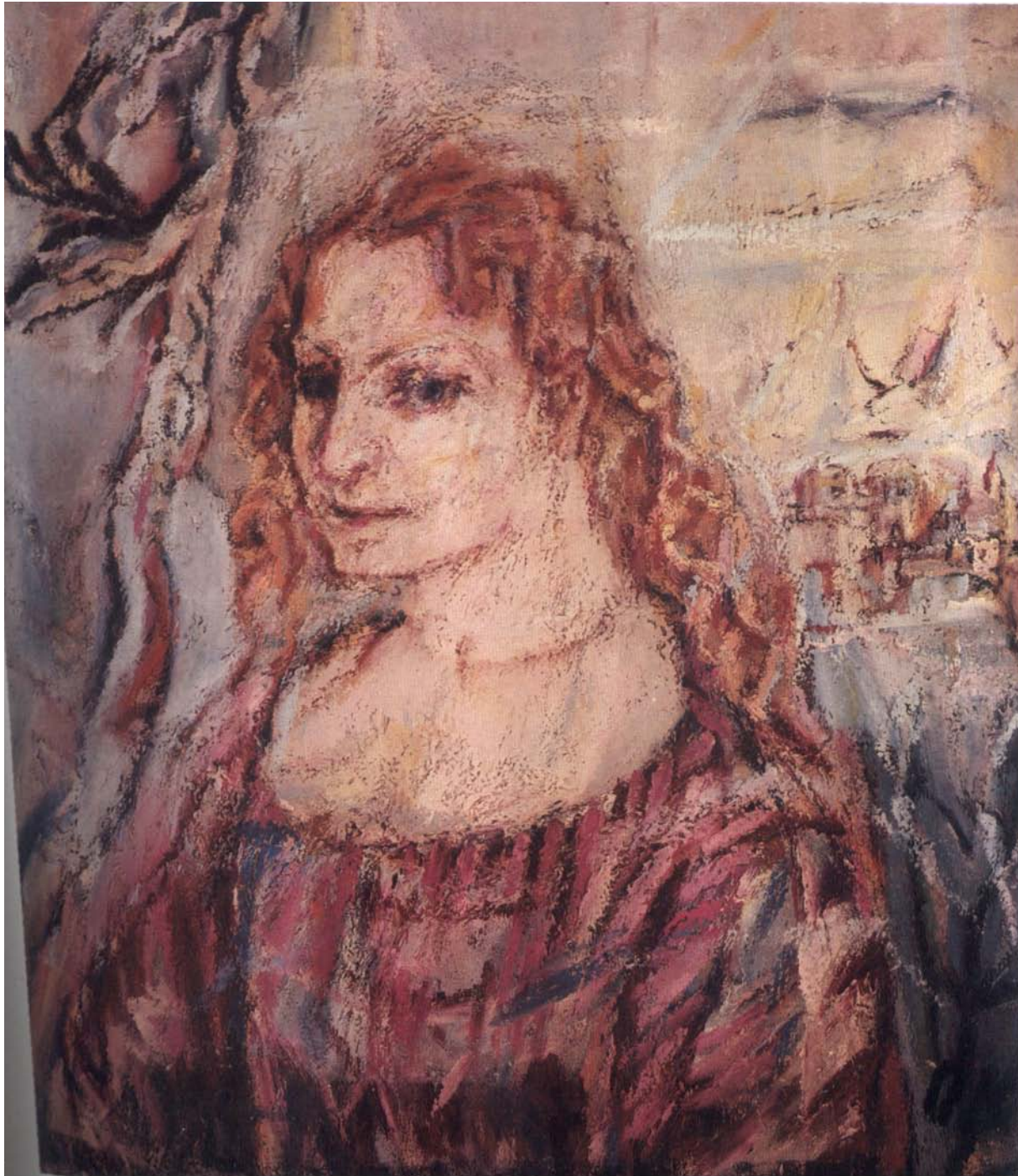




**Aquerelle**

**Paul Klee**

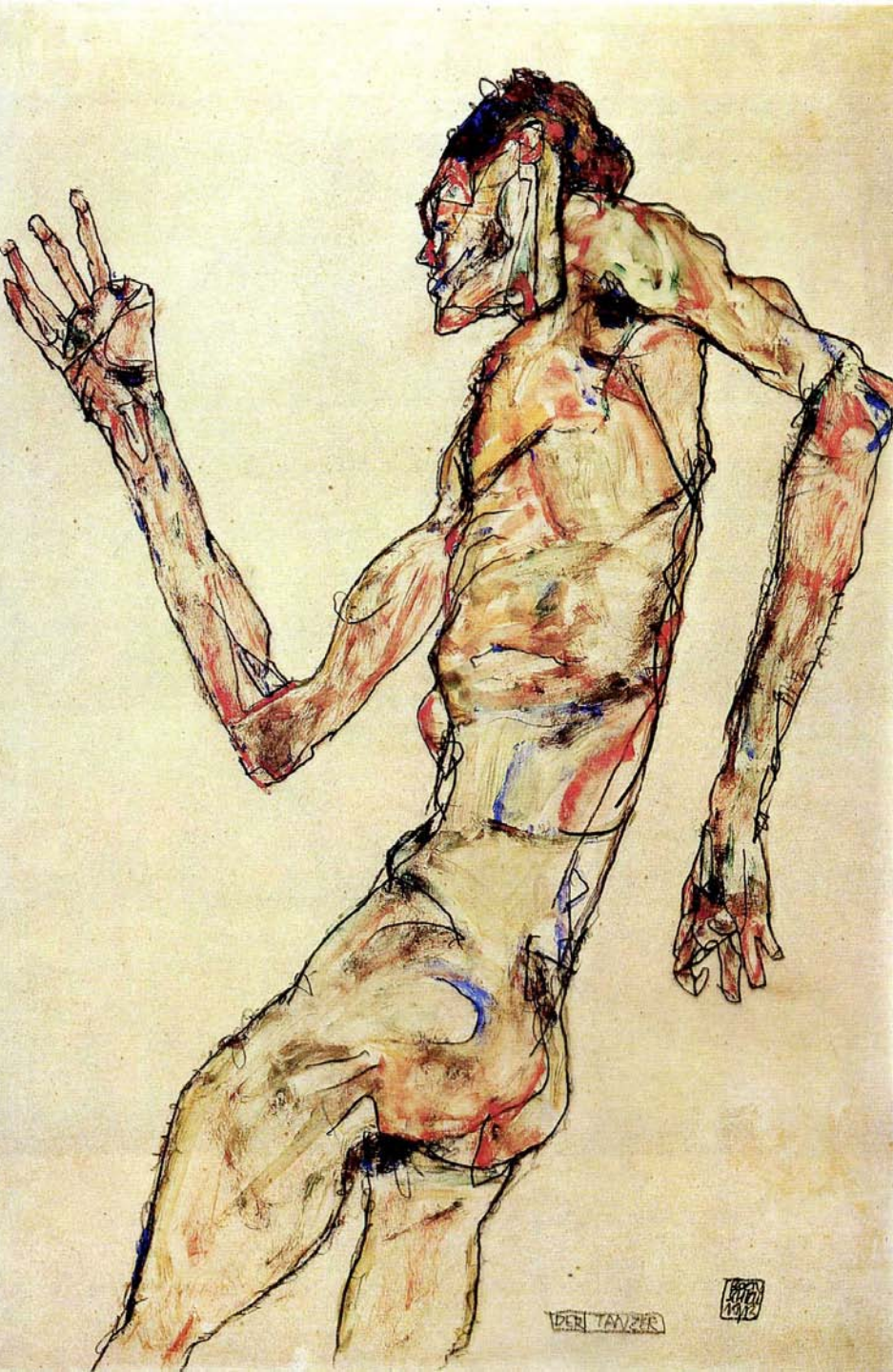




**Alma Mahler**

**Oskar Kokoschka,  
Vienna**





**Egon Schiele**  
**Vienna**

***Mutter und  
Tochter, Tänzer***





**La torre rossa**

**Giorgio de  
Chirico e  
la pittura  
metafisica**







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M. GUILLAUME APOLLINAIRE

GUILLAUME APOLLINAIRE

(Méditations Esthétiques)

## Les Peintres Cubistes

PREMIÈRE SÉRIE

Pablo PICASSO — Georges BRAQUE — Jean METZINGER  
Albert GLUCKS — Juan GRIS — Mlle Marie LAURENÇON  
Fernand LÉGER — François PICABIA — Marcel DUCHAMP  
DUCHAMP-VILLON, etc.

OUVRAGE ACCOMPAGNÉ DE 46 PORTRAITS ET REPRODUCTIONS HORS TEXTE

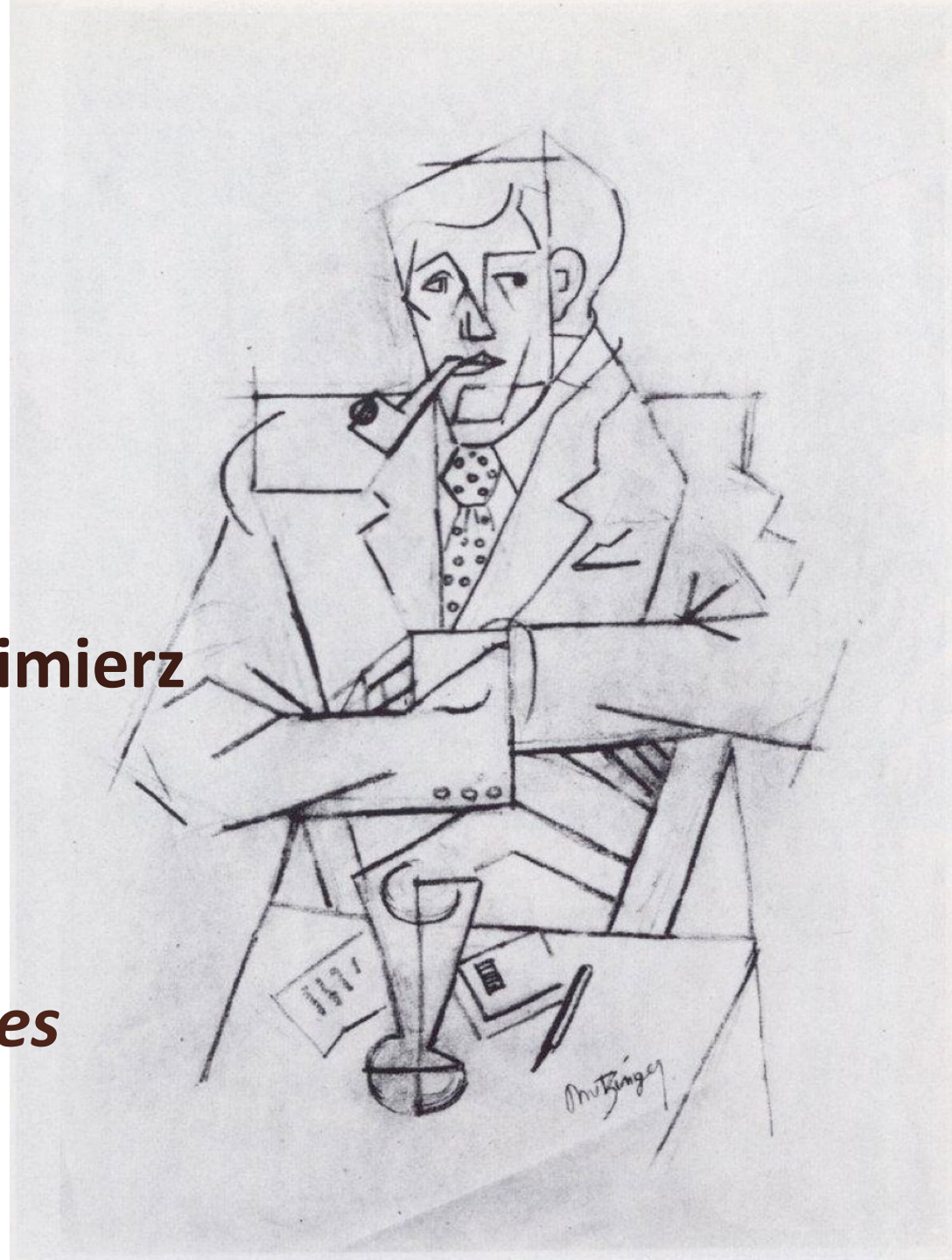


PARIS  
EUGÈNE FIGUIÈRE ET C<sup>o</sup>, ÉDITEURS  
7, RUE CORNEILLE, 7  
MCMXIII

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**Wilhelm Albert Włodzimierz  
Apollinary Kostrowicki  
Guillaume Apollinaire:  
*Les Peintres Cubistes,  
Méditations Esthétiques***

**(Jean Metzinger)**



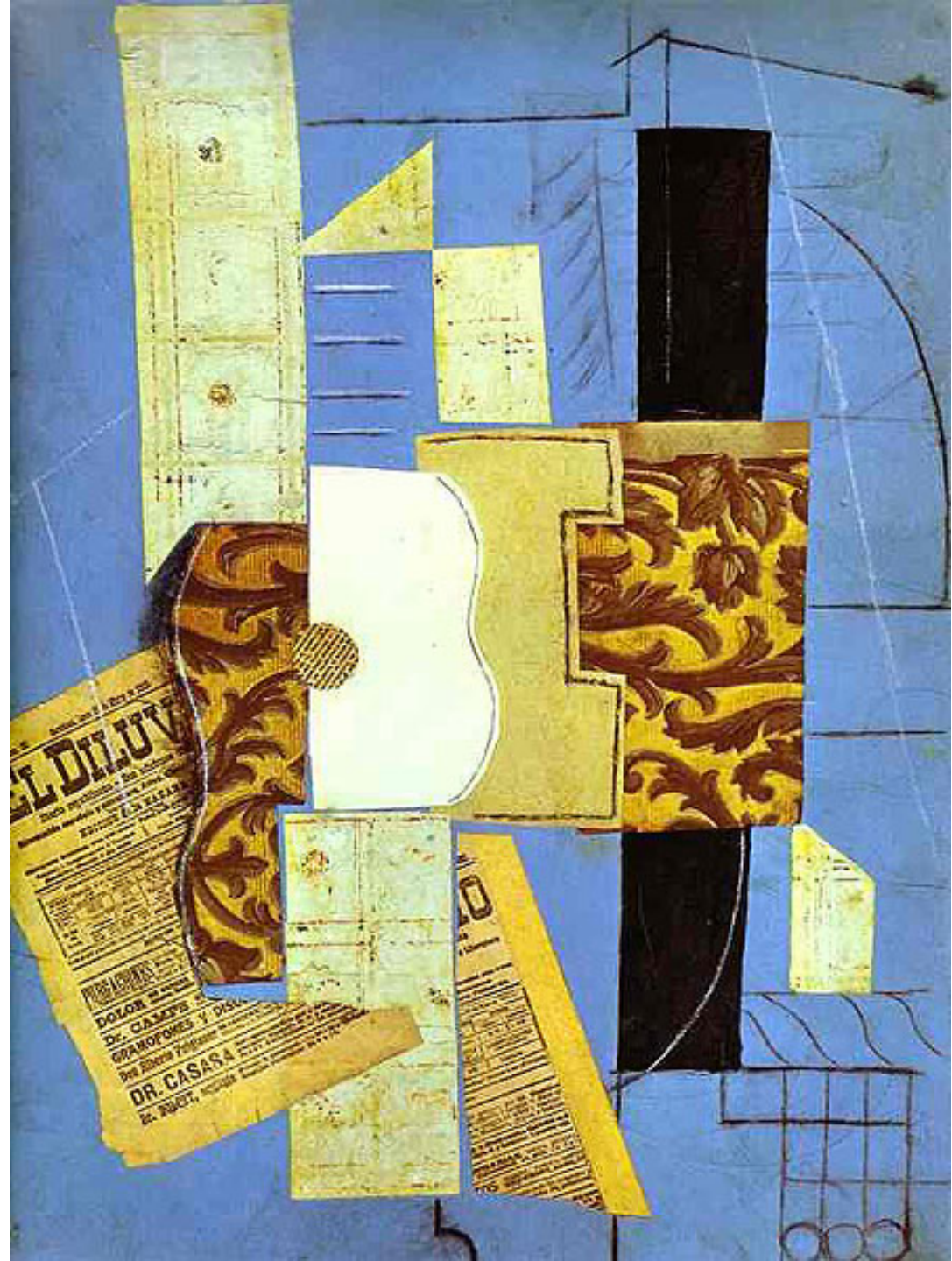
# El pájaro azul



**Jean Metzinger,  
Parigi**

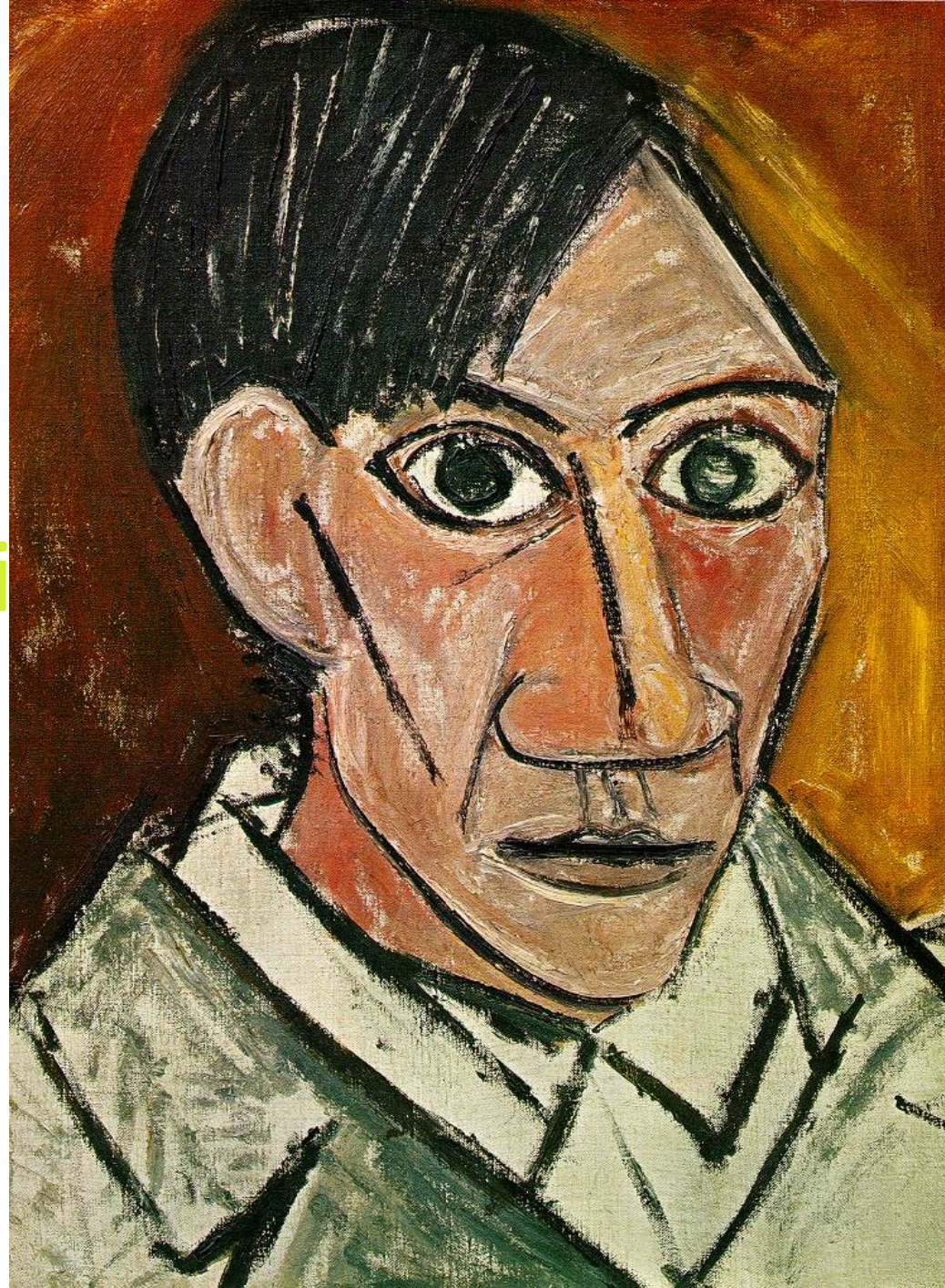


***guitar, violin***



pi

**Pablo Picasso,  
Parigi**



# DIREZIONE del MOVIMENTO FUTURISTA

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## **POESIA**

F. T. Marinetti - Paolo Buzzi - A. Palazzeschi  
E. Cavacchioli  
Corrado Govoni - Libero Altomare  
Luciano Folgore - E. Cardile  
G. Carrieri - G. Manzella-Frontini  
Mario Bètuda - Auro D'Alba  
Armando Mazza  
ecc.

## **PITTURA**

U. Boccioni - C. D. Carrà - L. Russolo  
Giacomo Balla - G. Severini  
ecc.

## **MUSICA**

Balilla Pratella

## **SCULTURA**

Umberto Boccioni

## **AZIONE FEMMINILE**

La poetessa  
M<sup>me</sup> Valentine de Saint-Point

---

120.000 adesioni

*Manifesto del futurismo*



**Dynamic Hieroglyphic of the Bal Tabarin**





**Gino Severini apre la sua galleria a Londra**



**Battle of  
lights,  
Coney Island, Mardi Gras**

***Three Heads***  
**Joseph Stella e Marcel**  
**Duchamp,**  
**(busto di Man Ray su**  
**Duchamp)**





ШЕЛК

ШЛ

НИТ

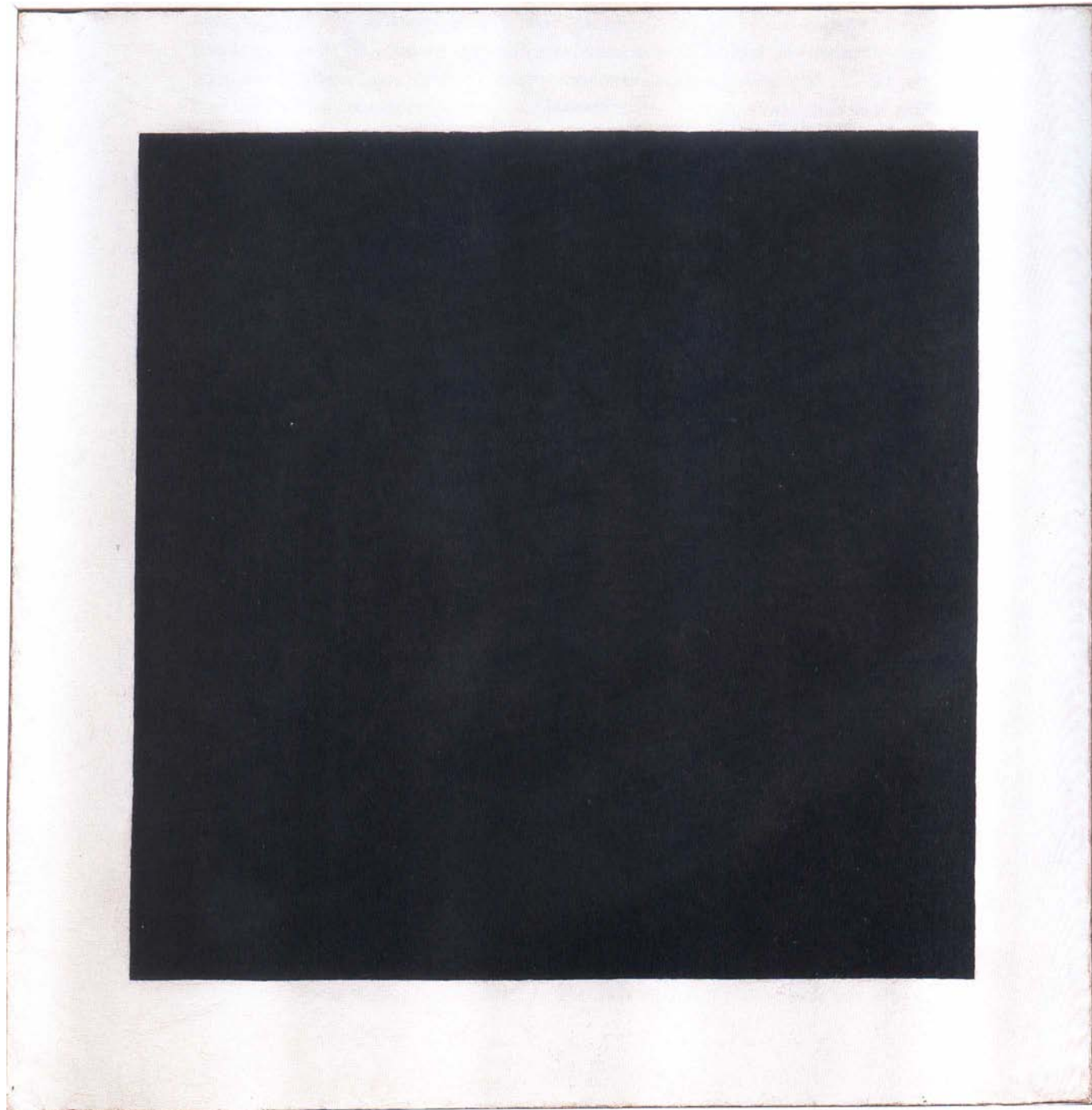
Р

Т. 402

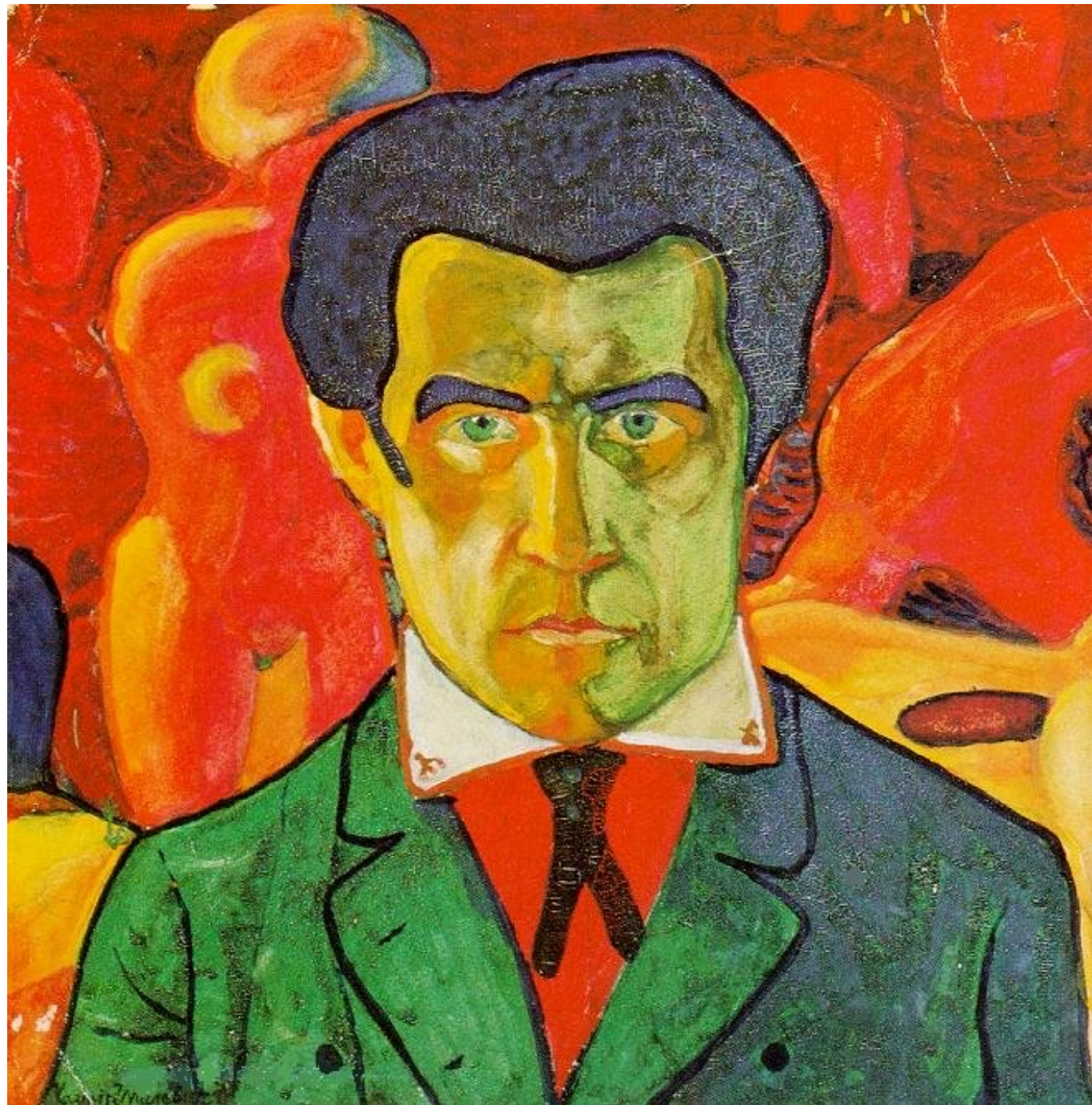
**Natal'ja Sergeevna  
Gončarova  
*ciclista*  
(cubo-futurismo)**



**quadrato  
nero su  
fondo bianco**



**Kazimir  
Malevich,  
suprematismo  
meccanico**









**Vasily  
Kandinsky,  
*improvisation  
33,*  
*Über das  
Geistige in der  
Kunst  
insbesondere in  
der Malerei***

***Nu descendant un  
escalie***



**Marcel  
Duchamp,  
Parigi –  
New York**



b



**Soir Bleu**

**Edward Hopper,  
New York**





**Vincenzo Peruggia**



**Mona Lisa recuperata (12 dicembre)**







**Eleanor Emily  
Hodgman Porter,  
*Pollyanna***

**George Edward  
Challenger,  
Professor  
Challenger**

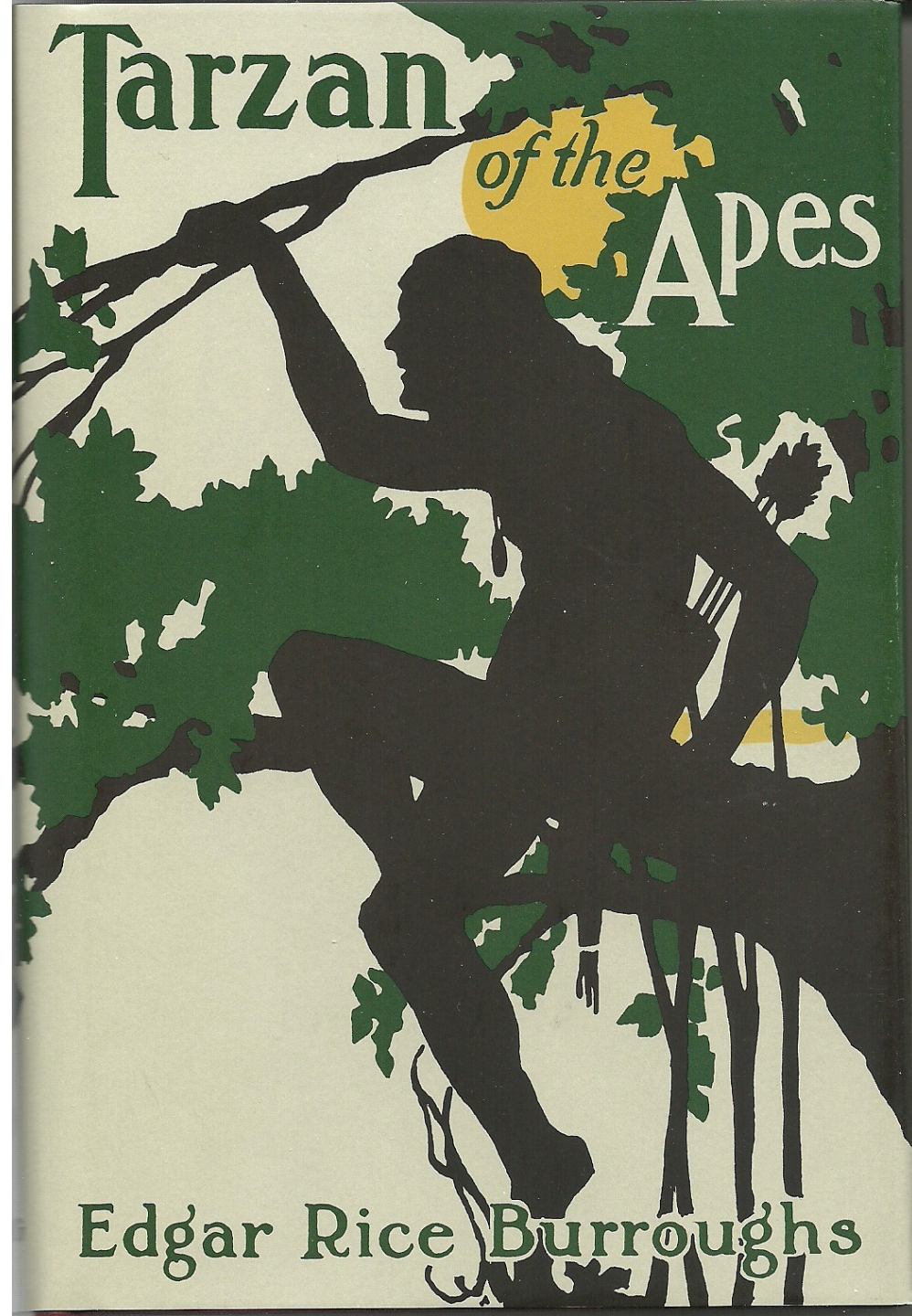




**Arthur Ignatius  
Conan Doyle,  
*The Poison Belt***

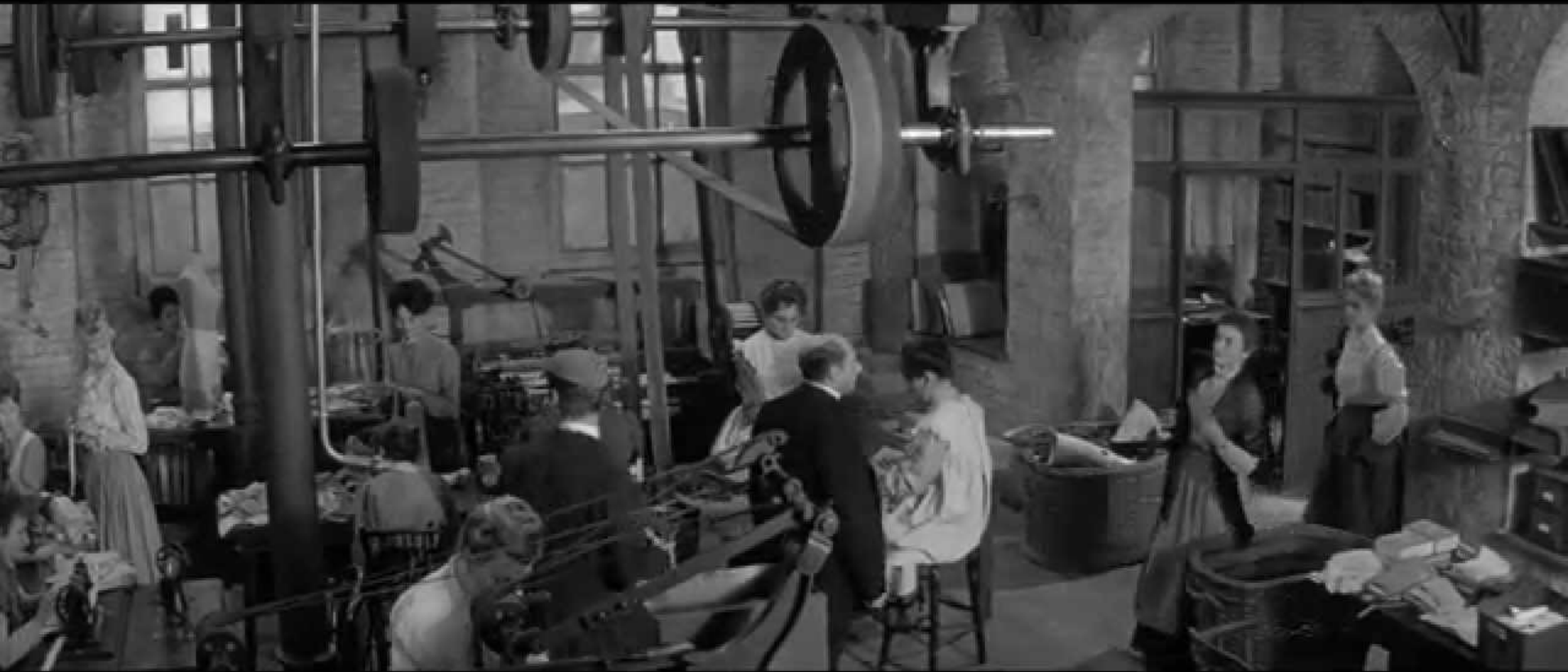


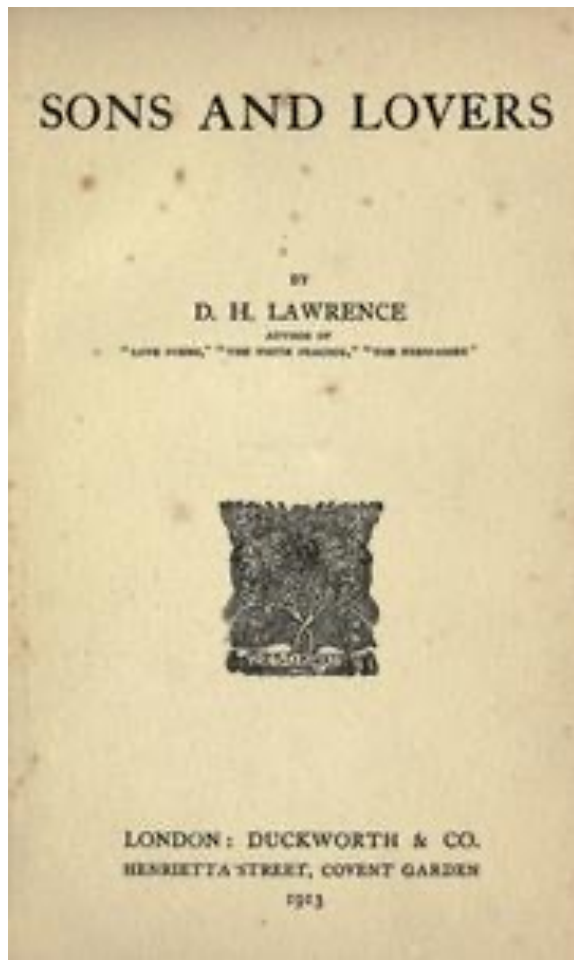
**Edgar Rice  
Burroughs**



***Tarzan of the Apes***

Edgar Rice Burroughs





**David Herbert  
Richards  
Lawrence,  
*Sons and lovers***







# DUBLINERS

BY  
JAMES JOYCE



LONDON  
GRANT RICHARDS LTD.  
PUBLISHERS

non. Les ~~parois~~ <sup>parois</sup> qui se trouvent de l'autre côté de la rue des  
 trois Pains, Bazar, Voies, etc. ont été mis, mais il n'y a pas de l'un ni de  
 l'autre que ce soit des maisons de Paris. Ce sont pour la plupart des  
 Croisés d'aujourd'hui ou non. Les autres ont été bâtis par le roi Louis le  
 chef de nos troupes avec sa suite, mais on ne voit ni croisés  
 de l'autre côté ni de l'autre. Les uns sont de la même époque que  
 d'autres.

association  
 pour l'histoire  
 de la ville  
 de Paris

~~Mais il n'y a rien de certain non plus. C'est d'ailleurs une fau-  
 plaisance le voir dans un de ces lieux qui nous amènent vers  
 la rue de la Harpe, la rue de la Harpe, la rue de la Harpe, etc.  
 qui nous font venir à Paris, à Paris, à Paris, etc.  
 à Paris, à Paris, à Paris, etc.~~

C'est que les noms à eux-mêmes ne font pas un relief, un éclairage,  
 un relief, un éclairage, qui font nos noms à Paris.  
 Mais nos associations de la rue ont fait l'imaginaire  
 l'induct avec la rue de la Harpe, les esprits de la  
 ville, l'histoire de la rue de la Harpe, etc.

lettre à l'association  
 Ces lettres de l'association  
 ont été envoyées à Paris  
 par la poste, etc.

Mais il n'y a rien de certain non plus. C'est d'ailleurs une fau-  
 plaisance le voir dans un de ces lieux qui nous amènent vers  
 la rue de la Harpe, la rue de la Harpe, la rue de la Harpe, etc.  
 qui nous font venir à Paris, à Paris, à Paris, etc.  
 à Paris, à Paris, à Paris, etc.

120  
 Mais il n'y a rien de certain non plus. C'est d'ailleurs une fau-  
 plaisance le voir dans un de ces lieux qui nous amènent vers  
 la rue de la Harpe, la rue de la Harpe, la rue de la Harpe, etc.  
 qui nous font venir à Paris, à Paris, à Paris, etc.  
 à Paris, à Paris, à Paris, etc.

Comme le récit  
 d'une existence  
 nomade existant  
 de il s'agit  
 avec elle

d'après  
 le récit  
 de la Harpe

Ces deux lettres  
 de la Harpe



TRIMMAGE DE L'AUTEUR

A LA RECHERCHE DU TEMPS PERDU

DU CÔTÉ DE CHEZ SWANN



# ***Die Verwandlung***



FRANZ KAFKA

# DIE VERWANDLUNG



DER JÜNGSTE TAG \* 22/23

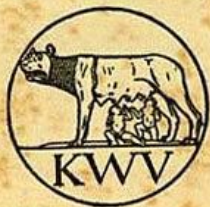
KURT WOLFF VERLAG · LEIPZIG

1 9 1 6



# DAS URTEIL

EINE GESCHICHTE  
VON  
FRANZ KAFKA



LEIPZIG  
KURT WOLFF VERLAG  
1916

Lg  
Kilche

# DER HEIZER

EIN FRAGMENT  
VON  
FRANZ KAFKA

434019  
H.A.H.S.

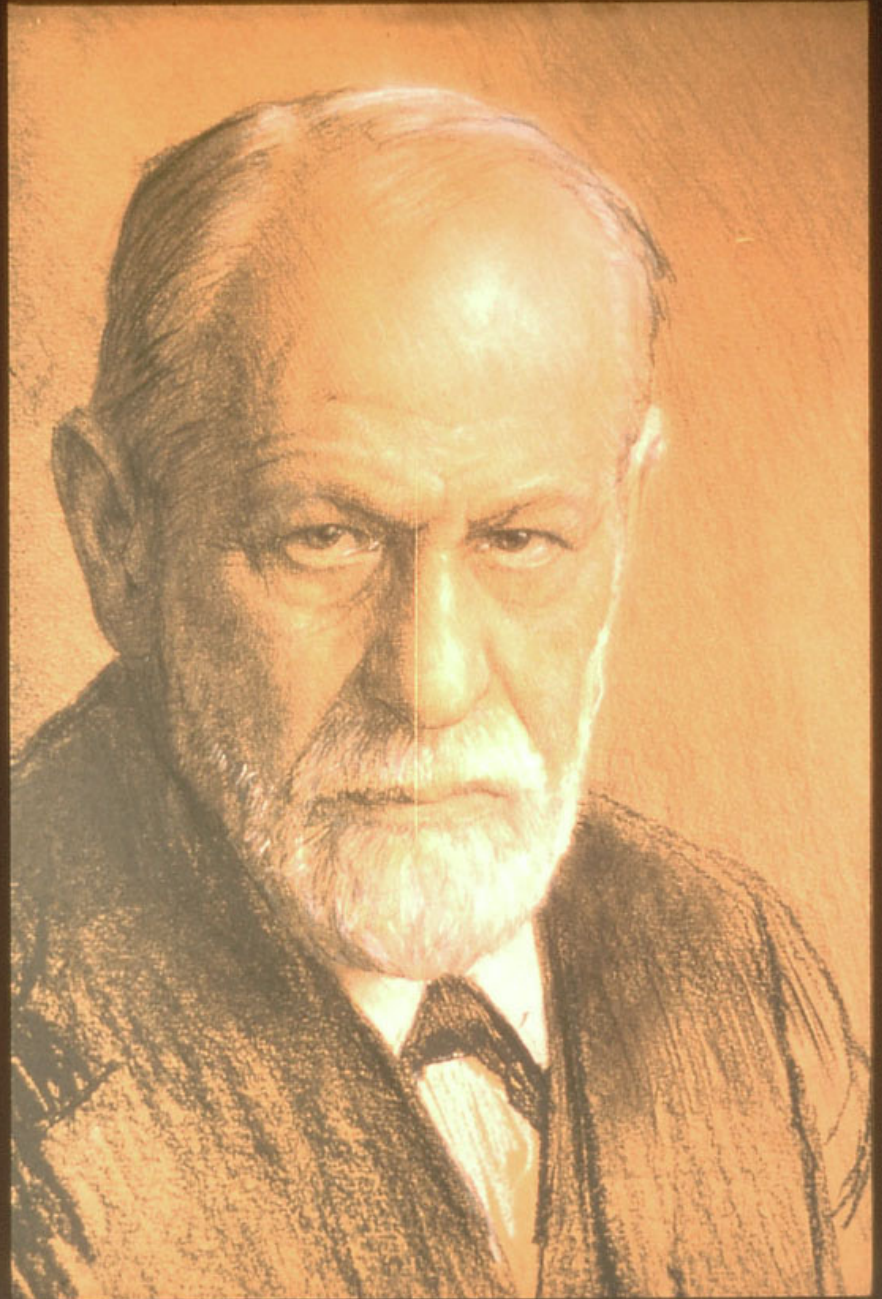
LEIPZIG  
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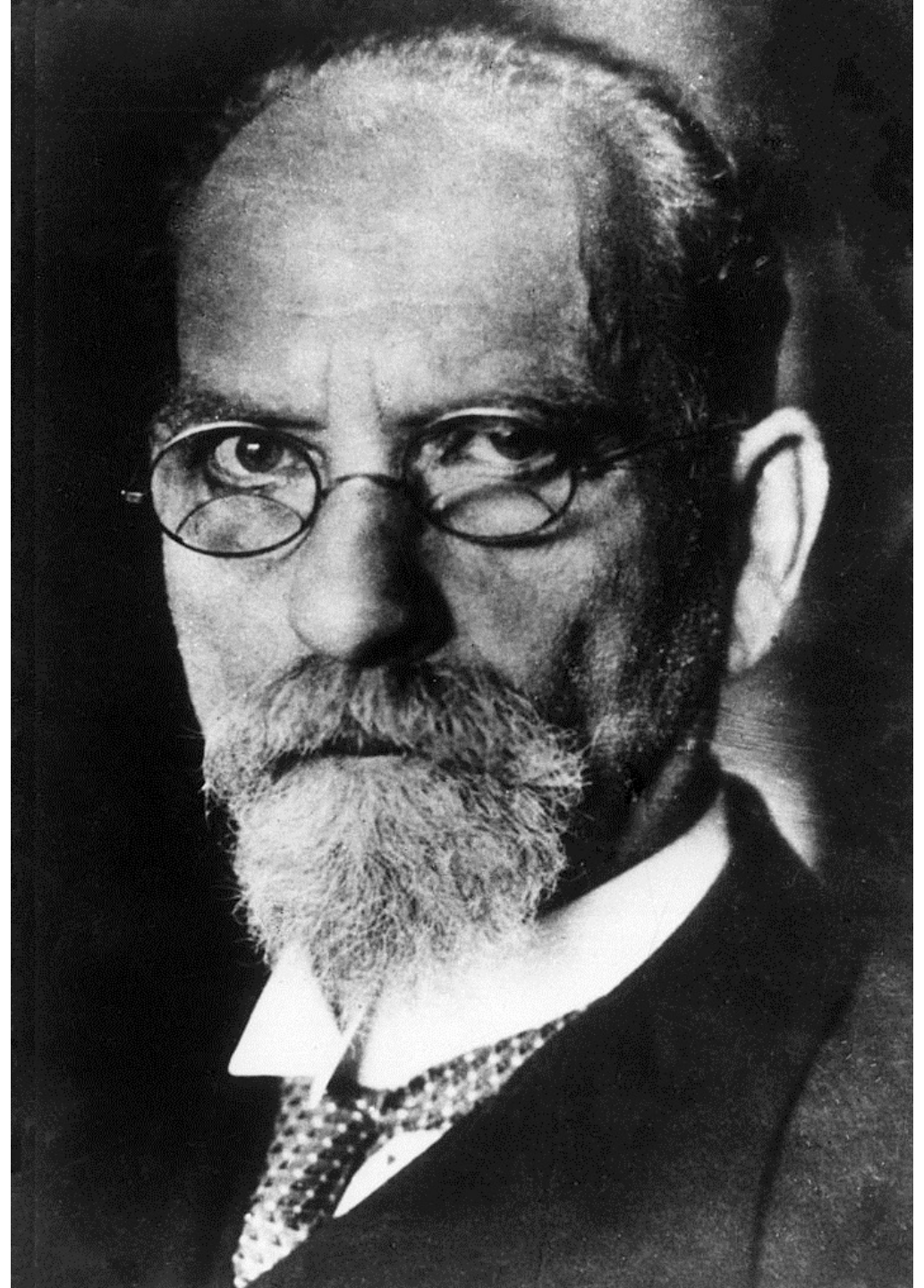




**Sigmund Freud**  
***Totem und Tabu,***  
**Vienna**



**Edmund Husserl**



***Ideen zu einer reinen  
Phänomenologie und  
phänomenologischen  
Philosophie***



**Miguel de  
Unamuno  
(Ramon Casas)**



OBRAS COMPLETAS  
DE  
MIGUEL DE UNAMUNO

VOLUMEN SEGUNDO

**Del sentimiento  
trágico de la vida  
en los hombres y en los pueblos**

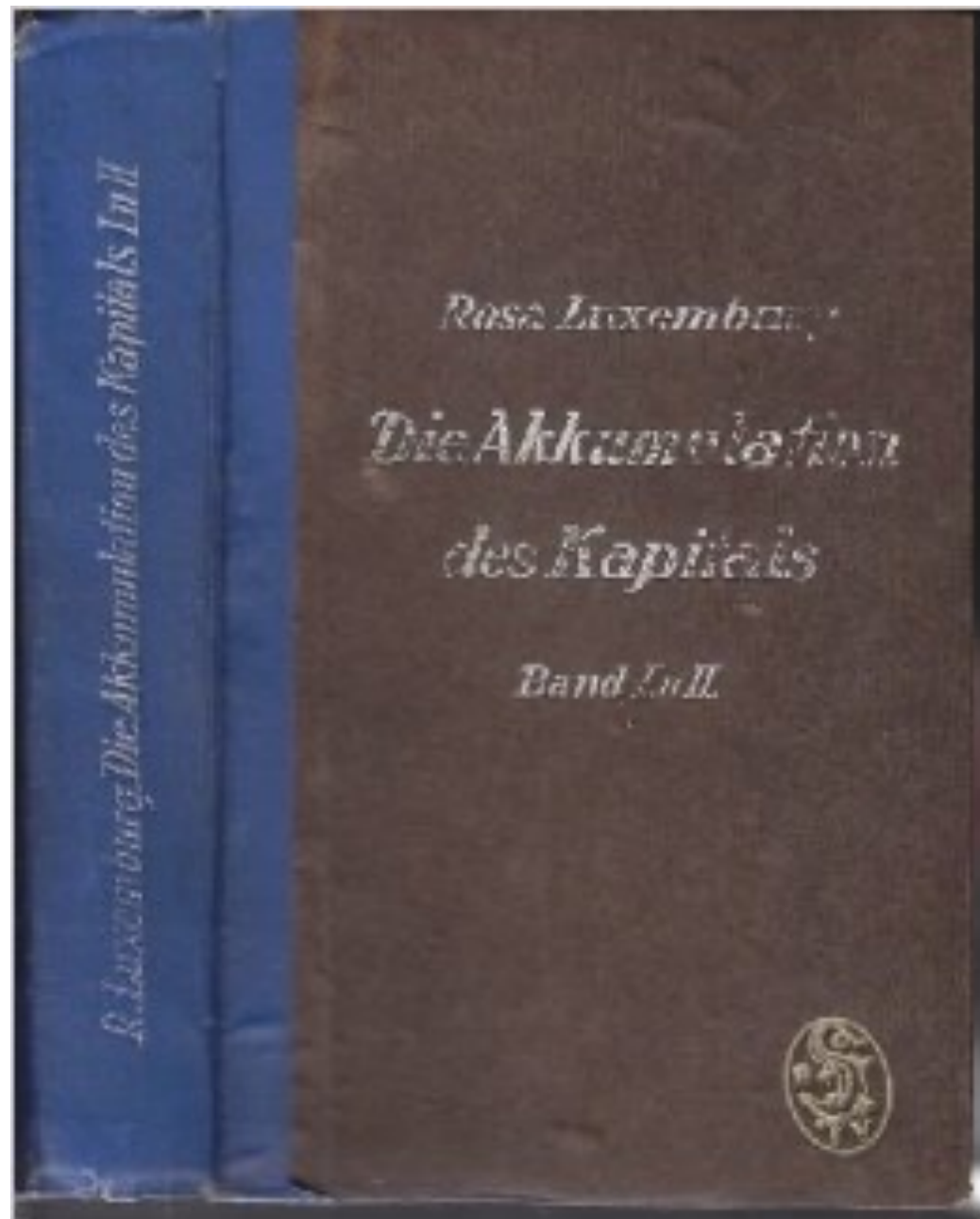


RENACIMIENTO

***Del sentimiento  
trágico de la vida  
en los hombres y  
en los pueblos***

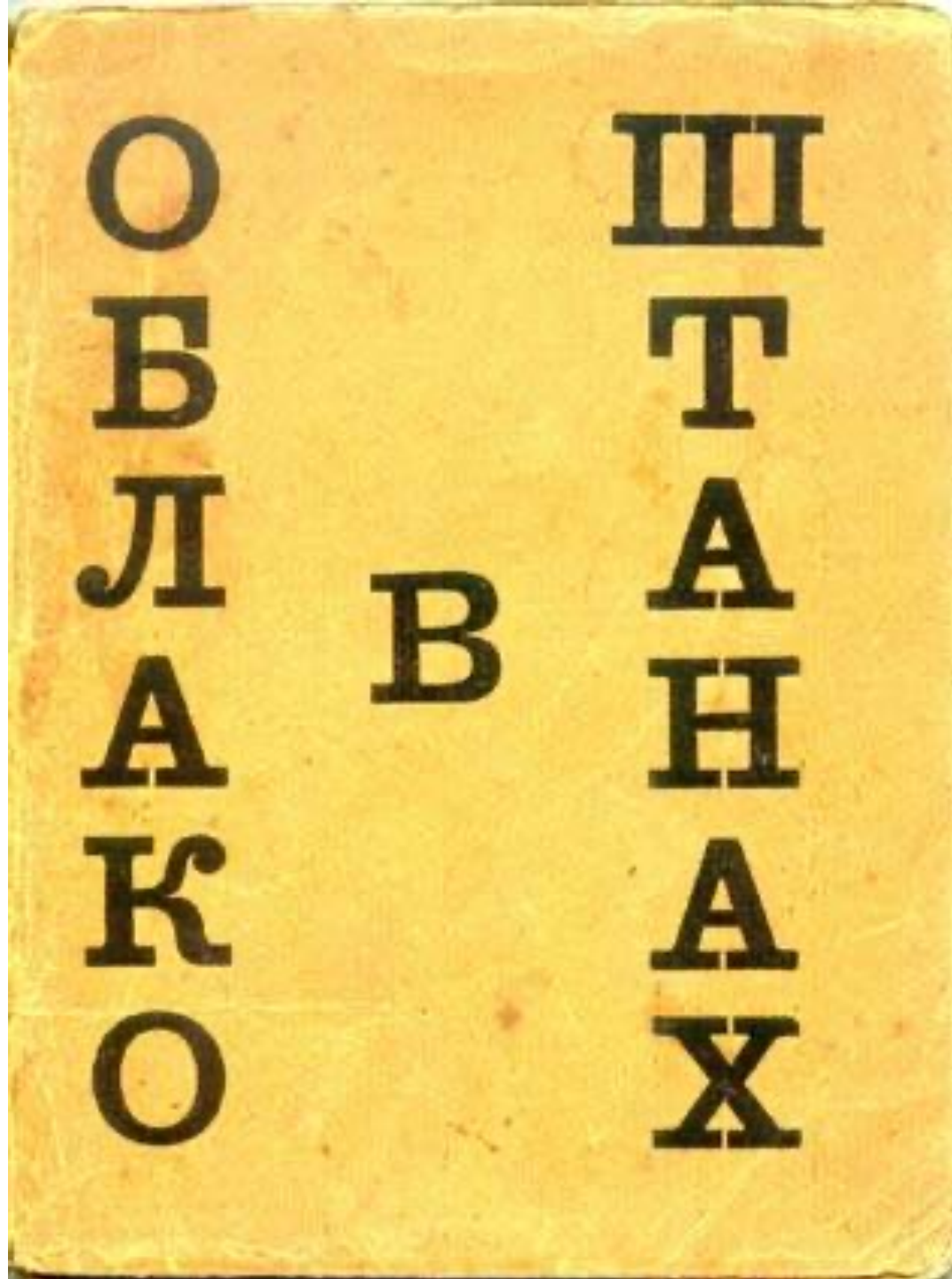
**Rosa Luxemburg**





***Die Akkumulation des Kapitals: Ein Beitrag zur ökonomischen Erklärung des Imperialismus***

**Oblako v shtanakh  
una nuvola in  
calzoni  
(i tredici apostoli)**



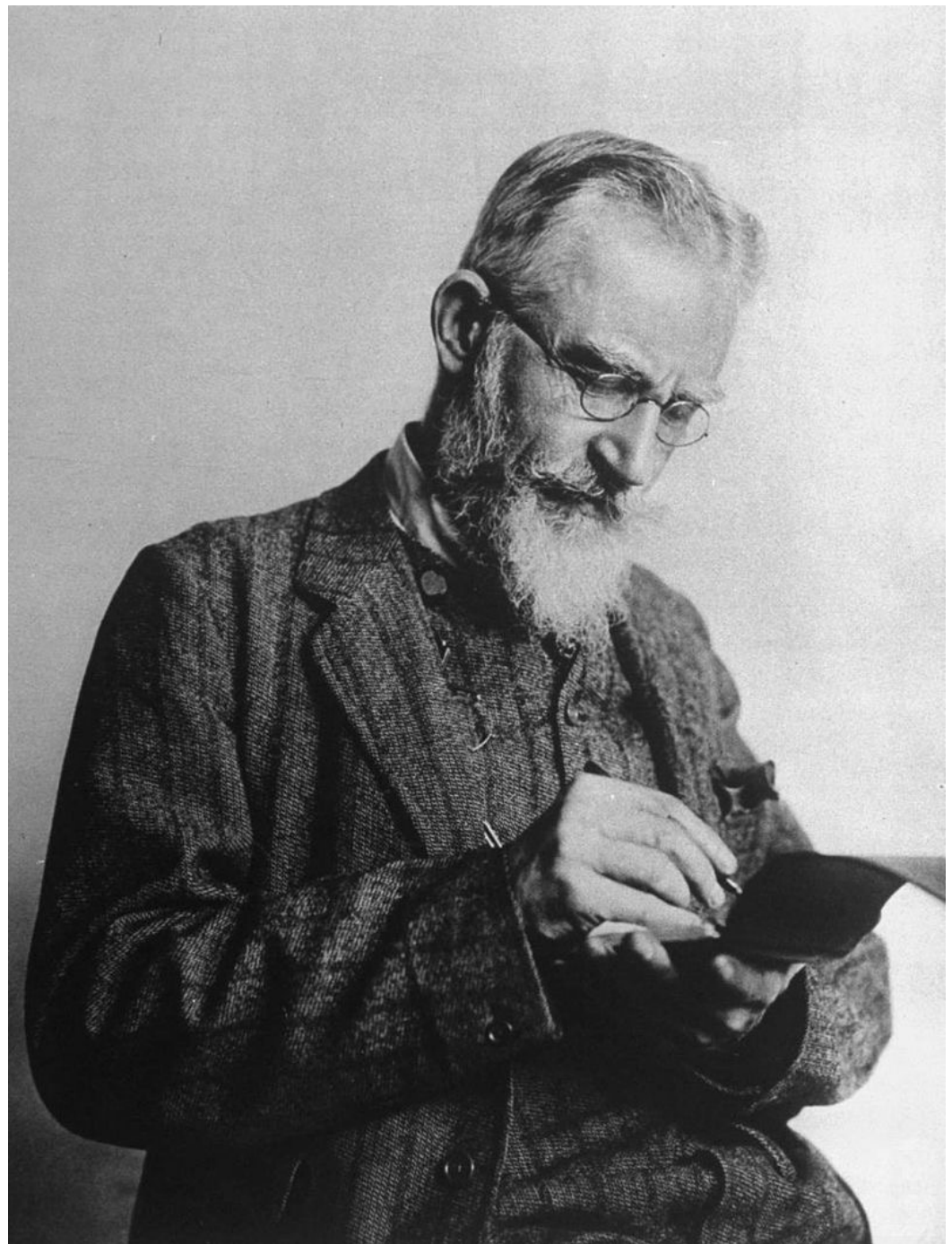




**Vladimir Vladimirovič Majakovskij  
(con Lilya Brik)**



**George Bernard  
Shaw,  
*Pygmalion*  
prima al Hofburg  
Theatre di Vienna**

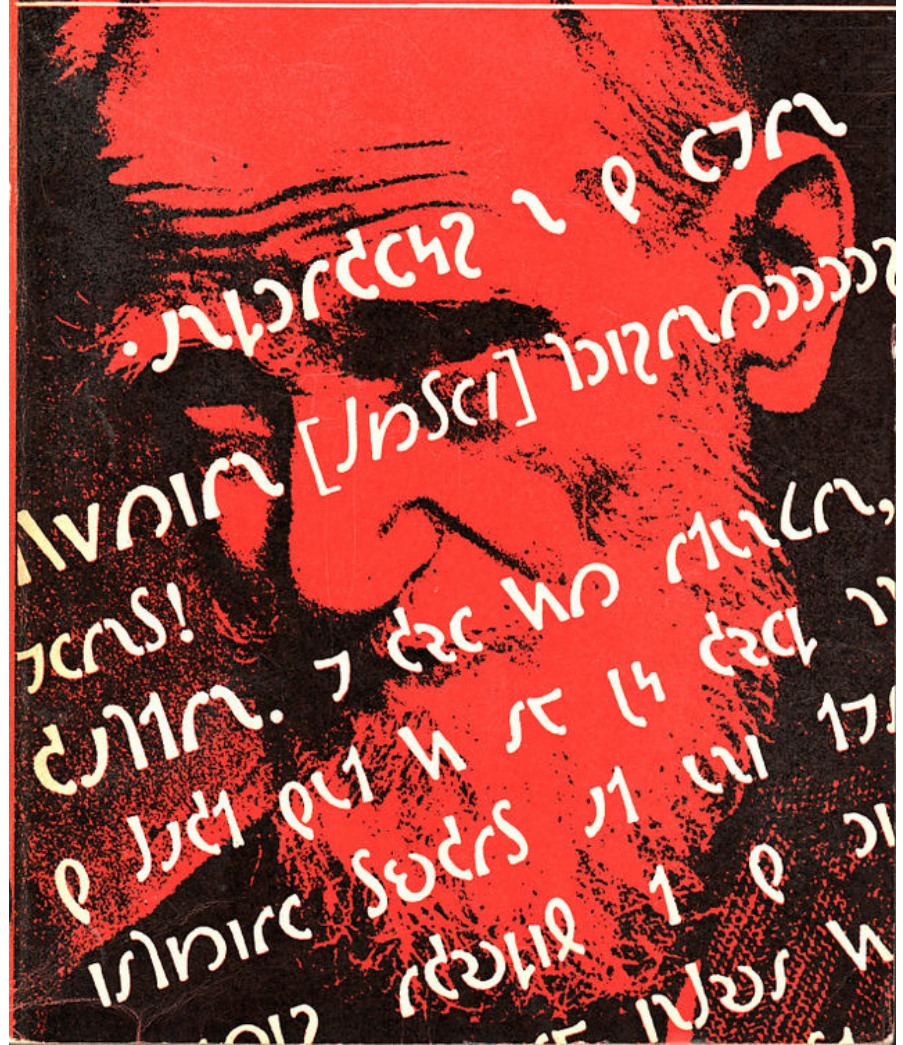




a Penguin Book

85c

The Shaw Alphabet Edition of  
**Androcles  
and the Lion**



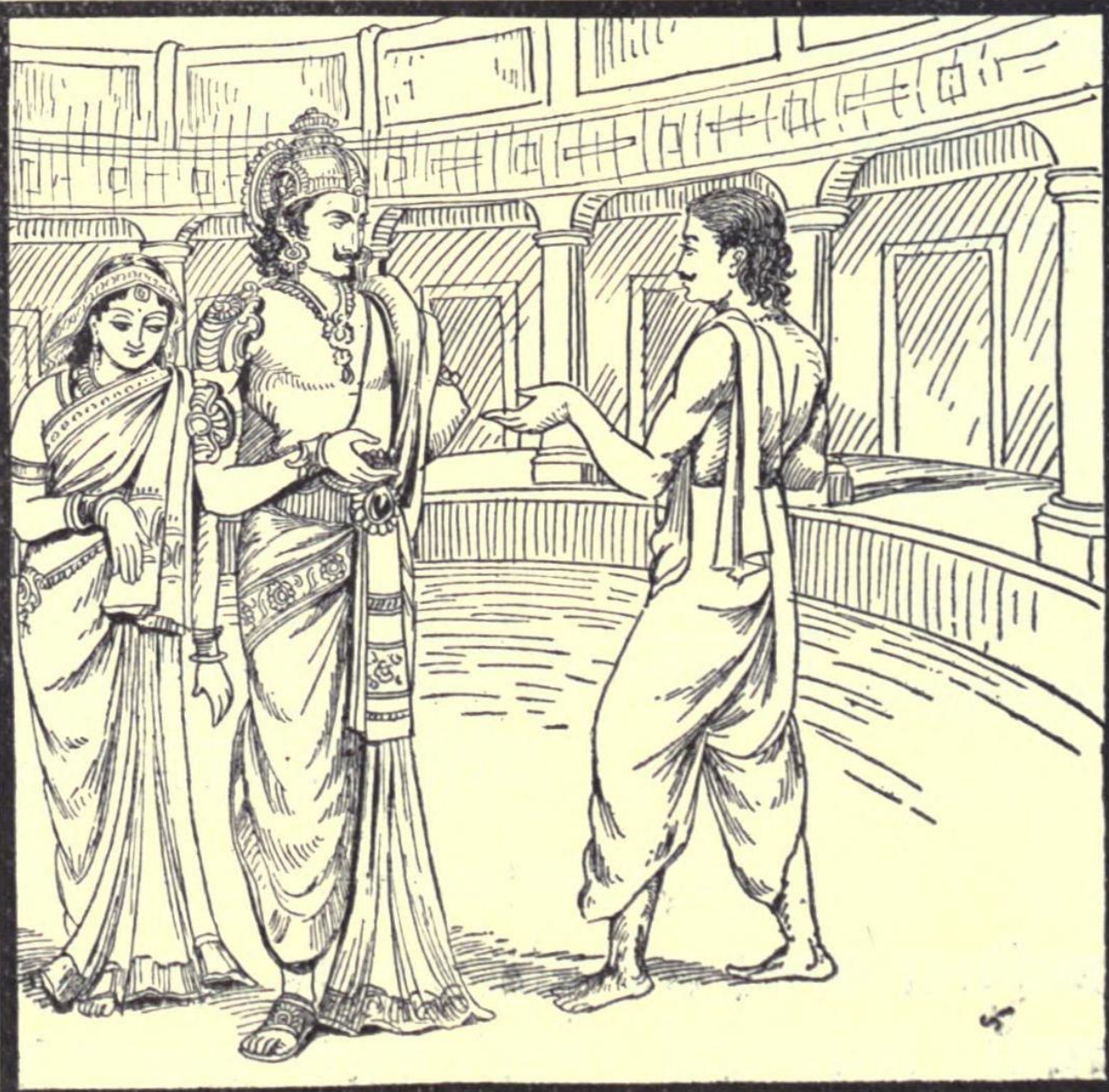
***Androcles and the  
Lion***  
**in alfabeto  
shawiano**



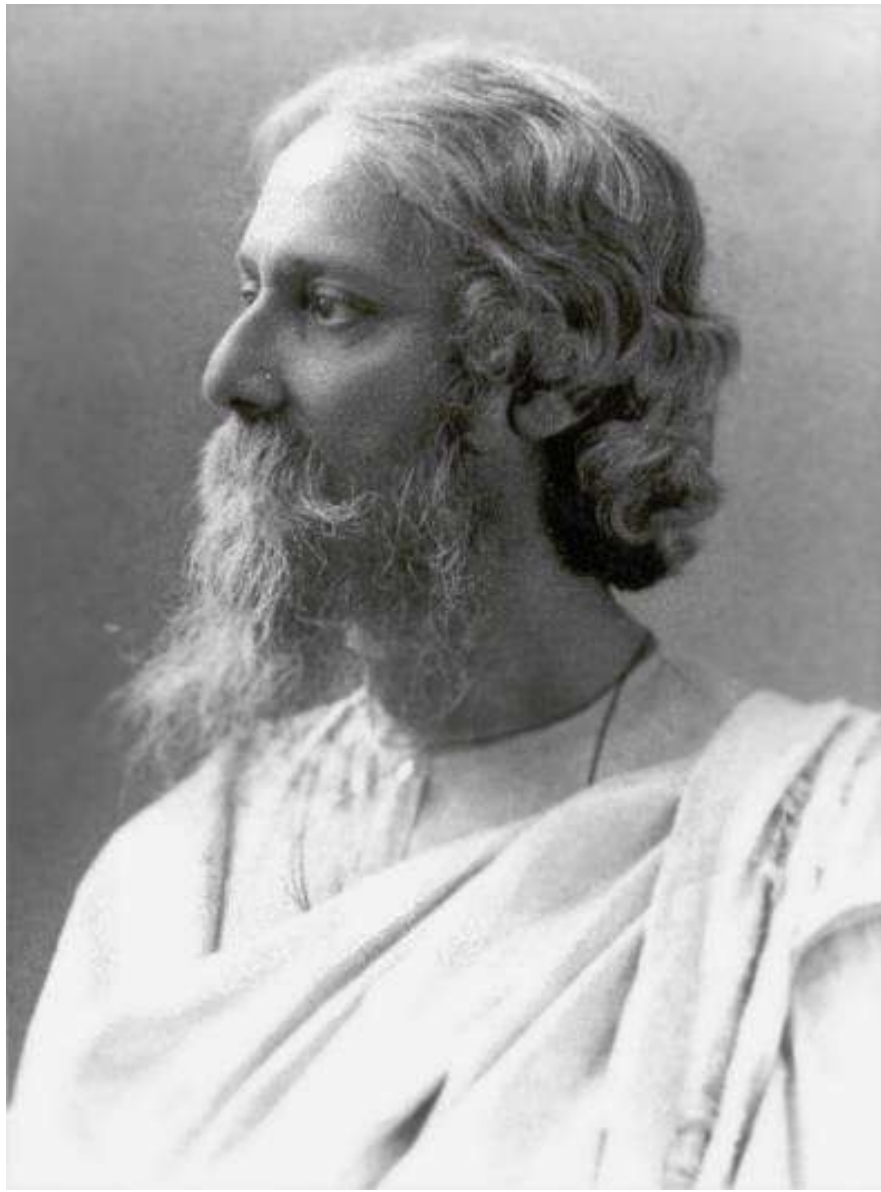
***Woyzeck* di Georg Büchner (1836)**

**Maximilian  
Goldmann  
Reinhardt produce  
al Residenztheater  
di Monaco la  
prima di *Woyzeck***





**Arjuna chiede in moglie Chitrangada**



**Rabindranath Tagore scrive l'atto unico *Chitra*,  
basato sulla Mahabharata**



Il sogno di Dro

Allegro

Andantino

Musical notation for the piano introduction, featuring a treble and bass clef with a 3/4 time signature. The piece begins with a dynamic marking of *mf.* and a *rall.* (rallentando) instruction. The tempo then changes to *molto* and finally to *Andantino*. The notation includes various chords and melodic lines.

Vocal and piano musical notation. The vocal line is in a soprano or alto clef. The lyrics are: "Oh come all'alba sognato... che il". The piano accompaniment is in a bass clef. The tempo is marked *Andantino*. The notation includes various chords and melodic lines.

Vocal and piano musical notation. The vocal line is in a soprano or alto clef. The lyrics are: "con la sua raffacciato sal... nell'improvviso...". The piano accompaniment is in a bass clef. The tempo is marked *rall.* (rallentando). The notation includes various chords and melodic lines.

**Il sogno di Dro**



**Francesco Balilla  
Pradella,  
*musica futurista***



Handwritten musical score for page 28. The score consists of approximately 12 staves. The top section contains several staves with complex musical notation, including notes, rests, and dynamic markings. A section labeled "I" is marked with a Roman numeral. The bottom section contains several staves with musical notation, including notes, rests, and dynamic markings. The page number "28" is written in the top right corner.

*e più allargando*

Handwritten musical score for page 29. The score consists of approximately 12 staves. The top section contains several staves with complex musical notation, including notes, rests, and dynamic markings. A section labeled "I" is marked with a Roman numeral. The bottom section contains several staves with musical notation, including notes, rests, and dynamic markings. The page number "29" is written in the top right corner.

**Jean Sibelius:**  
*Luonnotar* per  
soprano e  
orchestra  
(Aino Ackté)



Lent ♩ = 40

GRANDES FLÛTES

1  
2

CLARINETTES en LA

1  
2

1<sup>er</sup> VIOLON

*pp*  
sul Sol

2<sup>d</sup> VIOLON

*pp*  
*glissando*

ALTO

*pp*

VIOLONCELLE

*pp*

CHANT

Lent ♩ = 40

PIANO

*Trois Poèmes de Stéphane Mallarmé*

*pour chant avec 2 flûtes, 2 clarinettes, quatuor à cordes et piano*

Flute 2 doubles Piccolo; Clarinet 2 doubles Bass Clarinet

I. Soupir

*Dedicated to Igor Stravinsky*

II. Placet futile

*Dedicated to Florent Schmitt*

III. Surgi de la croupe et du bond

*Dedicated to Erik Satie*



**Maurice Ravel**

First system of the musical score, featuring a treble and bass clef with a grand staff. It includes a melodic line in the treble clef and a bass line in the bass clef. The music is in a key with one sharp (F#) and a 3/4 time signature. The first measure has a fermata over the treble clef. The second measure has a fermata over the bass line. The system ends with a double bar line.

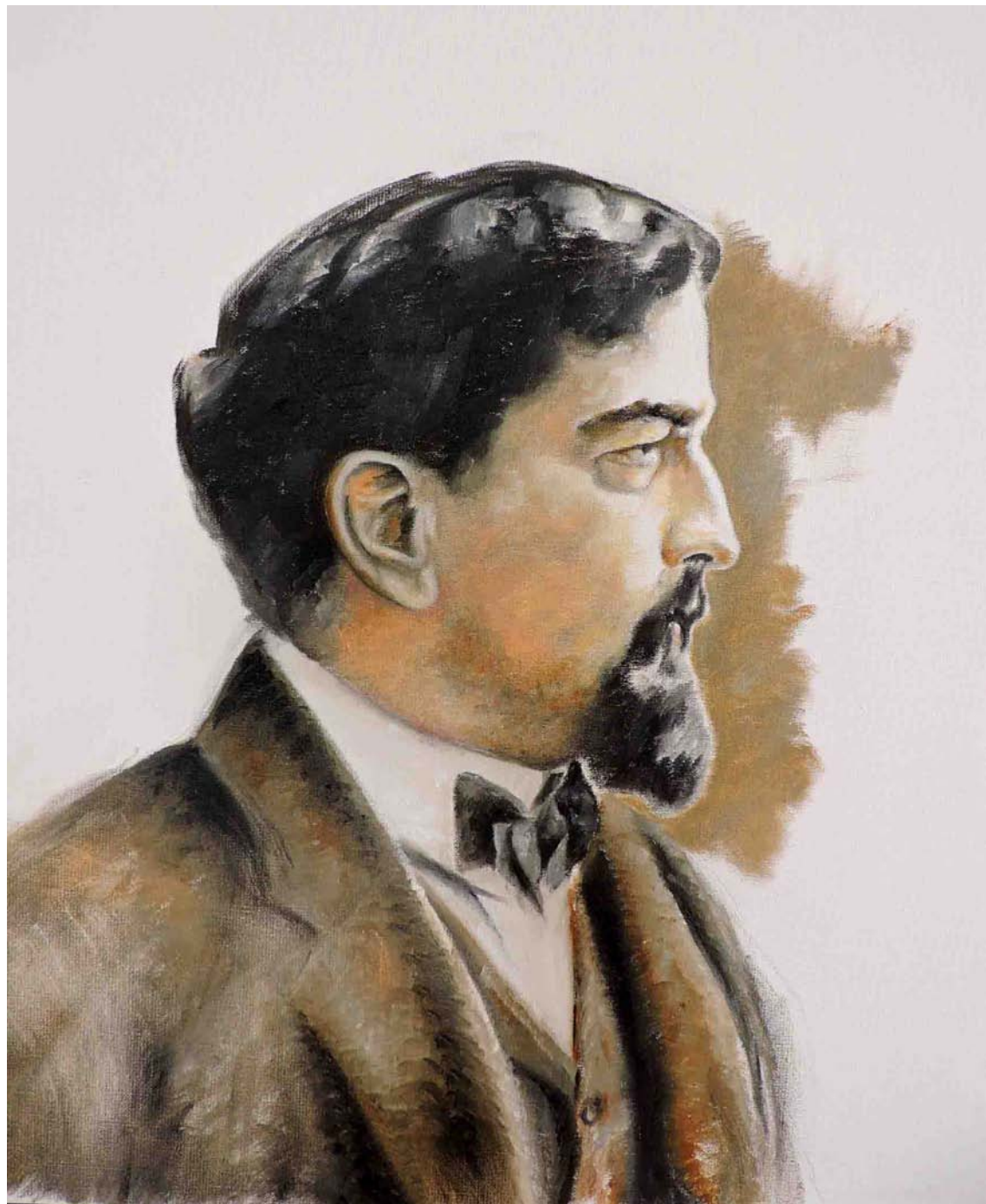
Second system of the musical score. It begins with a treble clef and a bass clef. The treble clef has a fermata over the first measure. The bass clef has a fermata over the first measure. The system includes the instruction "Cédez" followed by a long dash and a double bar line. The music continues with a melodic line in the treble clef and a bass line in the bass clef. The system ends with a double bar line.

Third system of the musical score. It begins with a treble clef and a bass clef. The treble clef has a fermata over the first measure. The bass clef has a fermata over the first measure. The system includes the instruction "Mouvé" above the treble clef. The music continues with a melodic line in the treble clef and a bass line in the bass clef. The system ends with a double bar line.

Fourth system of the musical score. It begins with a treble clef and a bass clef. The treble clef has a fermata over the first measure. The bass clef has a fermata over the first measure. The system includes the instruction "un peu en dehors" below the bass clef. The music continues with a melodic line in the treble clef and a bass line in the bass clef. The system ends with a double bar line.

**Bruillards,  
Préludes pour piano**

**Claude Debussy  
(Donald Sheridan)**





Piano

Piano

Piano

*accelerando*  
*f* tumultuoso

Piano

*gliss.*

Piano

*con tutta forza*

# Concerto per piano in re bemolle maggiore n.2

**Sergei  
Sergeyevich  
Prokofiev,  
Leningrado**



Eng. hn.

*p* *espress.*

Ob.

*mf*

Ob.

*mf*

E♭ Clar.

*ff*


**Igor Stravinsky**  
*Le sacre du  
printemps, Parigi*





***Watschenkonzert, Vienna 6 aprile 1913***

# 18. Der Mondfleck.

Sehr rasche  (ca 144)

Piccolo.




Musical score for Piccolo, Klarinette in B, Geige, and Violoncell. The Piccolo part starts with a rest followed by a series of notes with dynamics *p* and *pp*. The Klarinette in B part has a similar melodic line with dynamics *p* and *pp*. The Geige part plays a rhythmic accompaniment of eighth notes with a *pp* dynamic. The Violoncell part also plays a rhythmic accompaniment of eighth notes with a *pp* dynamic.

Klarinette in B.

Geige.

Violoncell.

Sehr rasche  (ca 144)

Rezitation.




Musical score for Rezitation. The melody consists of eighth and quarter notes in a 3/4 time signature, with dynamics *pp* and *ppp*.

Einen wei - ßen Fleck

des hel - len Mon - des

auf dem Rük - ken

Sehr rasche  (ca 144)

Klavier.



Musical score for Klavier. The piano accompaniment features chords and arpeggiated figures in both hands, with dynamics *ppsf* and *pp*.



**Arnold Schönberg**  
***Mondstruck***  
***Pierrot, Berlino***





# Sechs Bagatellen für Streichquartett

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## I

Anton Webern, Op. 9

Mäßig (♩ = ca 60)

I. Geige 1 mit Dämpfer *pp* 2 *p* 3 *pp*

II. Geige mit Dämpfer *pp*

Bratsche am Steg - *pp* am Steg - *pp*

Violoncell mit Dpfr *pp* *pp*

4 *rit.* 5 tempo *accel.* 6 *heftig* (♩ = ca 96) *rit.* 7

pizz. *pp* arco *pp* am Steg - *pp* *f* d-Saite *ff*

*pp* *p* *pp* *f* *ff* *ppizz.* *arco* *ppizz.* *f*

8 wieder mäßig (♩ = ca 60) 9 *rit.* 10 (♩ = ca 44)

pizz. *f* arco *f* *p* *pppp*

arco *ff* arco *f* *p* *pp* *pizz. 3 arco* *pppp*

*ff* *f* *p* *pp* *pp*

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Renewed Copyright 1952 by Anton Webern's Erben

# Sechs Bagatellen für Streichquartett op. 9

**Anton Webern**



*molto accel.* ..... *rit.* ..... *breiter* ..... *ziemlich langsam* (♩ = ca. 60)

Kl. Fl. 1. 2. Ob. Hr. 1. 2. 3. Kl. (in B) 1. 2. 3. Bkl. (in B) 1. 2. 3. Fg. 1. 2. 3. Kfg. 1. 2. Hr. (in F) 3. 3. 4. 1. 2. 3. 4. Trp. (in F) 1. 2. 3. 4. Pos. 1. 2. 3. 4. Kbth. Pke. Kl. Tr. Cel. Horn. Ges. 1. 2. 3. 4. Vl. I. Vl. II. Br. Vel. (m. spr. Bg.) Kb. div. \*) Kleingeschriebene Noten event. auslassen

*gest. - - - offen, (offen) Schalltr. hoch!* *crec.* *nehmen Dpf.* *mol - to* *offen* *f cresc.* *nehmen Dpf.* *m. Dpf.* *mp* *f* *ff* *molto* *ppp* *PP - P* *Pausen genau einhalten!* *(sempre) ppp* *ff* *molto accel.* ..... *rit.* ..... *breiter* ..... *ziemlich langsam* (♩ = ca. 60)

*rob gestrichen* *ff* *gestrichen* *mit spring Bogen* *col legno* *f (rob)* *mit spring Bogen* *crec.* *ff* *gewöhnlich* *nehmen Dpf.* *gewöhnlich* *ppizz.* *gewöhnlich* *ppizz.* *gewöhnlich* *ppizz.* *gewöhnlich* *ppizz.* *gewöhnlich* *ppizz.*

\*) Durch Streichen der zwischen Daumen u. Zeigefinger festgeklümmten G-Saite zu erzeugen

# Fünf Orchesterlieder, nach Ansichtkarten- Texten von Peter Altenberg. Op.4



**Alban Berg**

AT THE DEVIL'S BALL [I]

By IRVING BERLIN

*Allegro moderato*

*f* *fz*

5 *mf*

*♩ Till ready*

*p* *p*

8

11

I had a dream, last night, That filled me  
The dev-il's Pa and Ma— Were stand-ing

full of fright: I dreamt that I \_\_\_\_\_ was with the dev-il, be-low, In his  
at the bar— Con-vers-ing with \_\_\_\_\_ the lit-tle fel-low who first— Put the

great big fi-ery hall, \_\_\_\_\_ Where the dev-il was giv-ing a Ball.  
pain in cham-pagne wine, \_\_\_\_\_ He was pour-ing it out in a stein.

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# AT THE DEVIL'S BALL

By  
**IRVING BERLIN**

WATERSON BERLIN & SNYDER ©  
MUSIC PUBLISHERS  
112 WEST 38th ST. NEW YORK

*Exp. 1/13*



**Irving Berlin (Israel Isidore Beilin) e il ragtime**

**Louis Armstrong  
inizia a suonare la  
cornetta**



# 1. 4. 6. 8.

2. 3. 5. 7. 9. 10.

11. 12. 13. 14. 15.

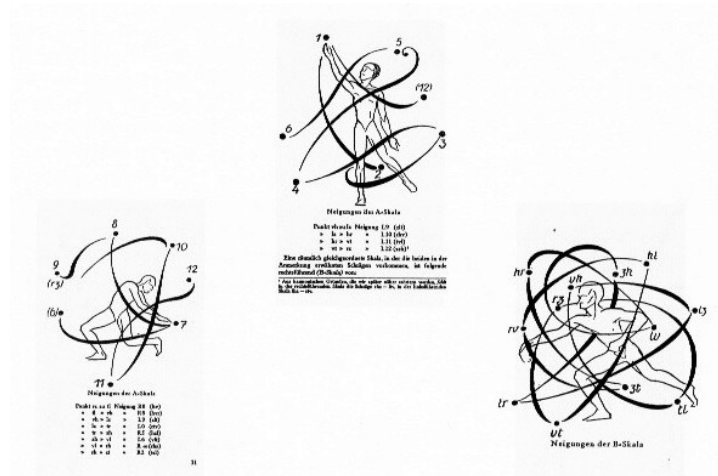
16. 17. 18. 19. 20.

21. 22. 23. 24. 25.

26. #



# Rudolf von Laban Choréographie, Monaco







**Vaslav Nijinsky:**  
**coreografia della**  
***Sacre du printemps***





**Sergei Pavlovich  
(Serge) Diaghilev,  
*Ballets Russes***

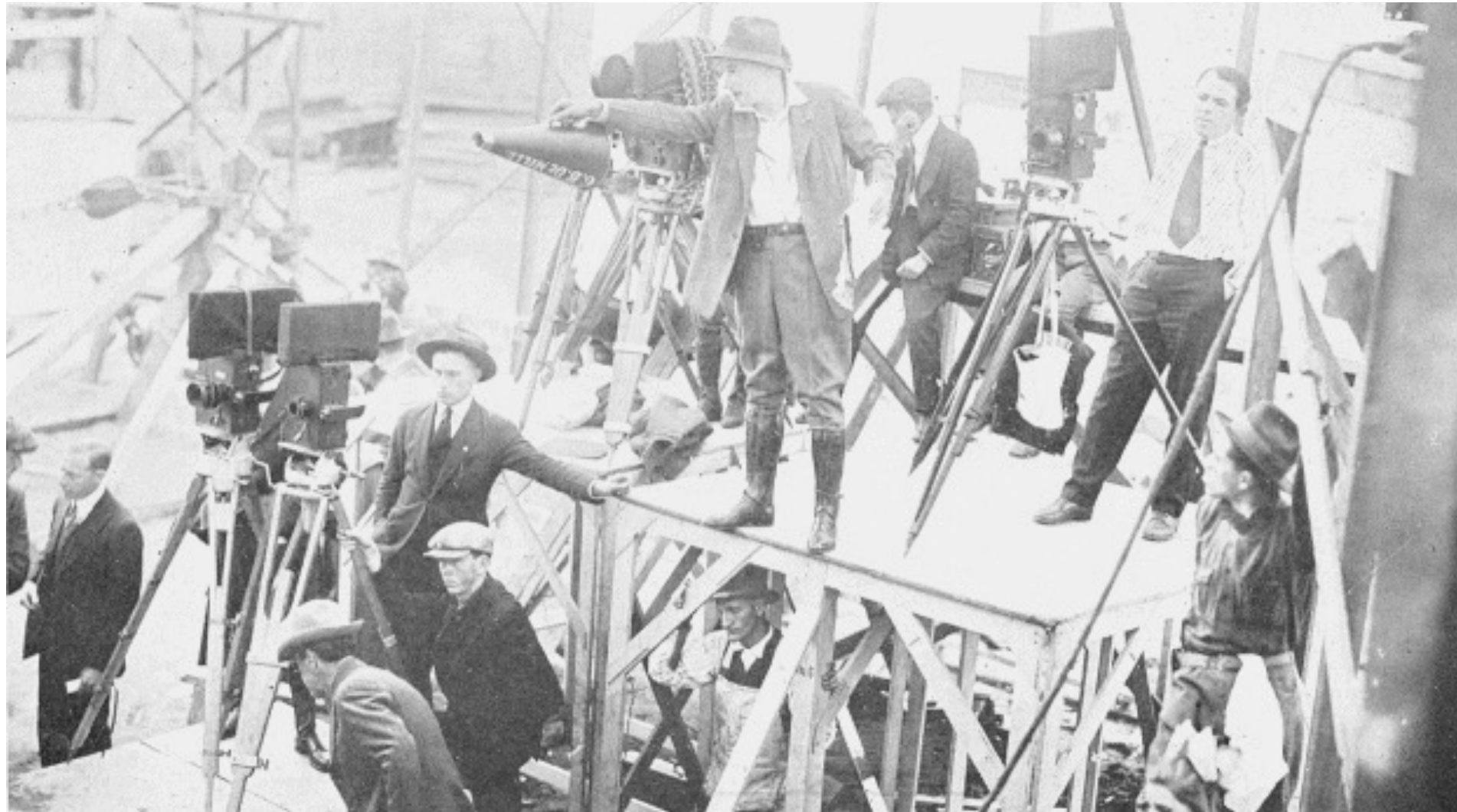


***Gli ultimi giorni di Pompei*, regia di Mario Caserini e Eleuterio Rodolfi primo colossal e blockbuster mondiale del cinema**



***The Squaw Man* segna l'inizio della produzione di film a Hollywood**

# Cecil de Mille

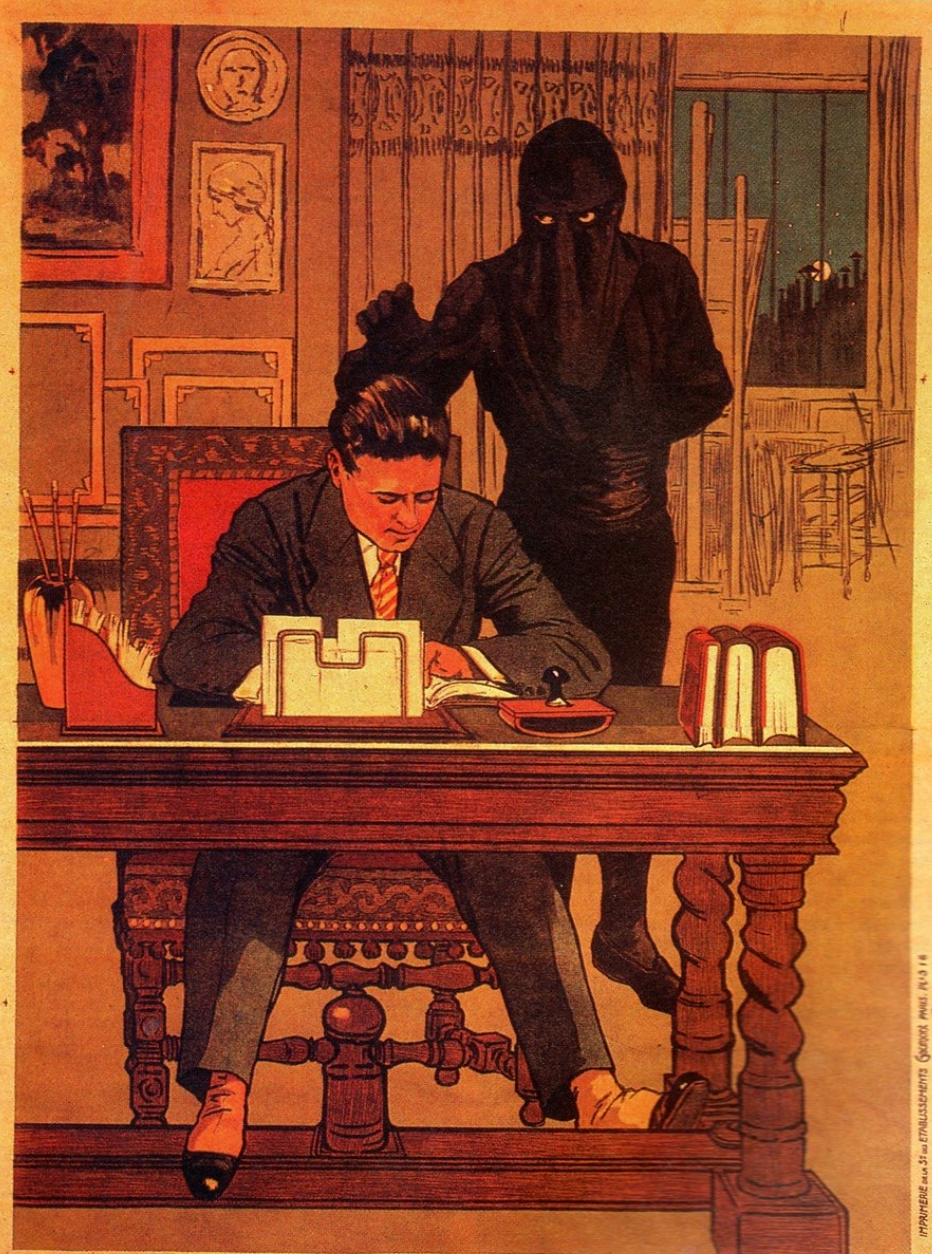




**René Navarre**



***Fantomas* inaugura il  
film a episodi**



**FANTÔMAS**

LE MORT QUI TUE

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**nasce il personaggio del “tramp” di Charlie Chaplin  
alla Keystone nel film *Mabel's Strange Predicament*  
con Mabel Normand**

BRITISH BOARD OF FILM CENSORS

75-77, SHAFTESBURY AVENUE, W.

This picture.....

has been approved for Public Exhibition

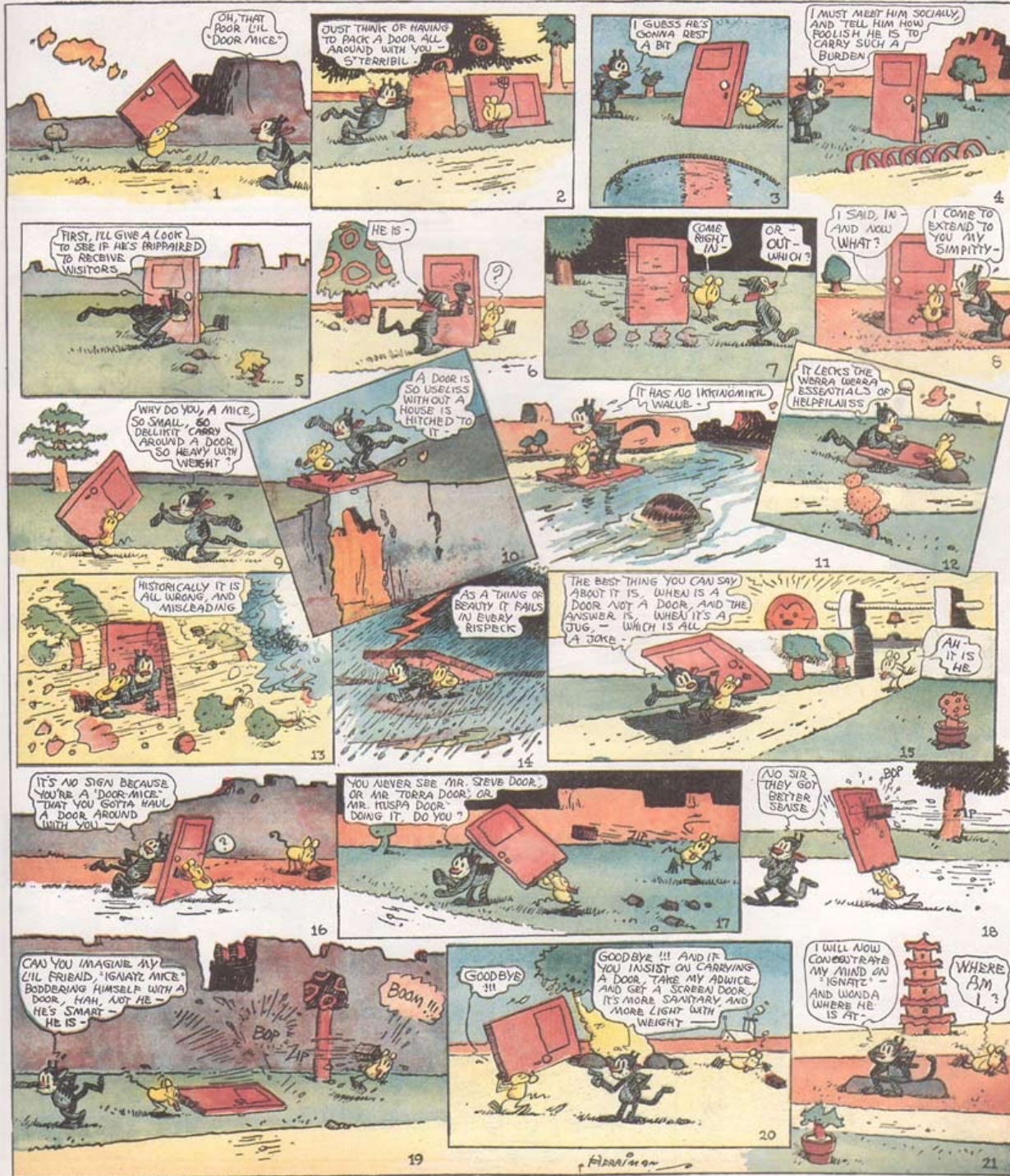


Examiner.....  
.....

*G. A. Bedford*  
President



**istituita la censura cinematografica in UK *The British Board of Film Censors***



OH, THAT DOOR L'IL DOOR MICE-

JUST THINK OF HAVING TO PACK A DOOR ALL AROUND WITH YOU - S' TERRIBIL -

I GUESS HE'S GONNA REST A BIT

I MUST MEET HIM SOCIALLY AND TELL HIM HOW FOOLISH HE IS TO CARRY SUCH A BURDEN

FIRST, I'LL GIVE A LOOK TO SEE IF HE'S RIPPARED TO RECEIVE VISITORS

HE IS -

COME RIGHT IN OR - OUT - WHICH?

I SAID, IN - AND NOW WHAT? I COME TO EXTEND TO YOU MY SIMPITY -

WHY DO YOU, A MICE, SO SMALL, SO DELIKIT, CARRY AROUND A DOOR SO HEAVY WITH WEIGHT?

A DOOR IS SO USELESS WITHOUT A HOUSE IS HITCHED TO IT

IT HAS NO INTRIGAMIKIL VALUE -

IT LECKS THE WERRA WERRA ESSENTIALS OF HELPFULNESS

HISTORICALLY IT IS ALL URRONG, AND MISLEADING

AS A THING OR BEAUTY IT FAILS IN EVERY RESPECT

THE BEST THING YOU CAN SAY ABOUT IT IS - WHEA IS A DOOR NOT A DOOR, AND THE ANSWER IS - WHEA IT'S A JUG, - WHICH IS ALL A JOKE -

AH - IT IS HE

IT'S NO SIGN BECAUSE YOU'RE A 'DOOR-MICE' THAT YOU GOTTA HAUL A DOOR AROUND WITH YOU

YOU NEVER SEE MR. STEVE DOOR, OR MR. TORRA DOOR, OR MR. MUSPA DOOR, DOING IT. DO YOU?

NO SIR, THEY GOT BETTER SENSE

CAN YOU IMAGINE MY L'IL FRIEND, 'IGNATZ MICE' BODDERING HIMSELF WITH A DOOR. HAH, NOT HE - HE'S SMART - HE IS

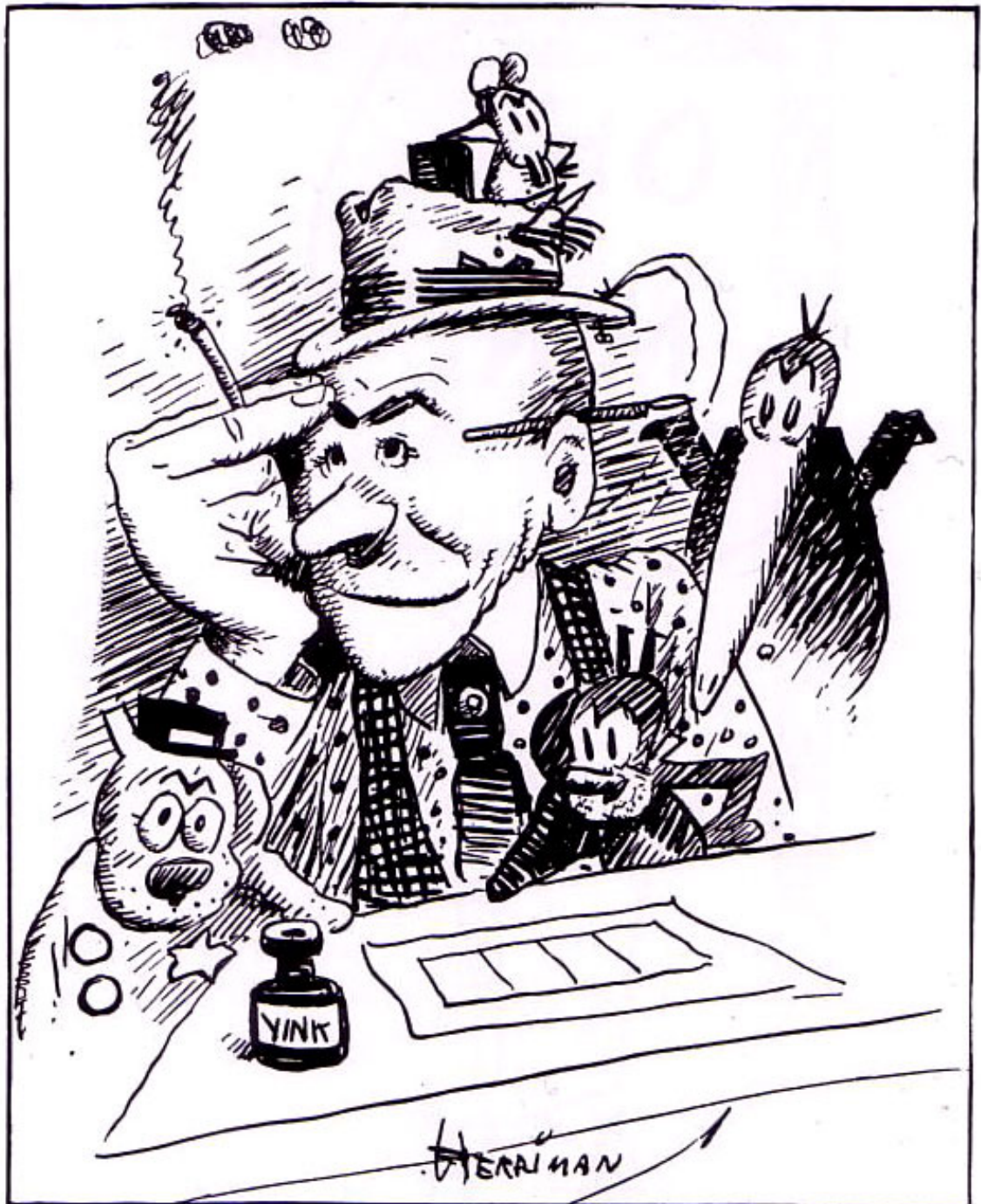
GOODBYE !!!

GOODBYE !!! AND IF YOU INSIST ON CARRYING A DOOR, TAKE MY ADVICE, AND GET A SCREEN DOOR. IT'S MORE SANITARY AND MORE LIGHT WITH WEIGHT

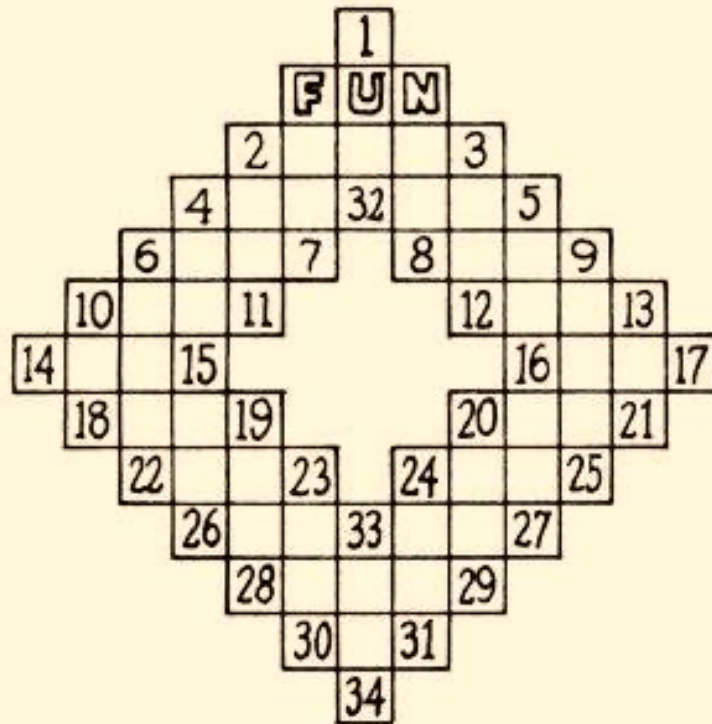
I WILL NOW COMBUTRANE MY MIND ON 'IGNATZ' - AND WONDA WHERE HE IS AT -

WHERE AM I?

**George Harriman**  
***Crazy Cat***



## FUN'S Word-Cross Puzzle.



**F**ILL in the small squares with words which agree with the following definitions:

- |                                  |                                      |
|----------------------------------|--------------------------------------|
| 2-3. What bargain hunters enjoy. | 10-18. The fibre of the gomuti palm. |
| 4-5. A written acknowledgement.  | 6-22. What we all should be.         |
| 6-7. Such and nothing more.      | 4-26. A day dream.                   |
| 10-11. A bird.                   | 2-11. A talon.                       |
| 14-15. Opposed to less.          | 19-28. A pigeon.                     |
| 18-19. What this puzzle is.      | F-7. Part of your head.              |
| 22-23. An animal of prey.        | 23-30. A river in Russia.            |
| 26-27. The close of a day.       | 1-32. To govern.                     |
| 28-29. To elude.                 | 33-34. An aromatic plant.            |
| 30-31. The plural of is.         | N-8. A fist.                         |
| 8-9. To cultivate.               | 24-31. To agree with.                |
| 12-13. A bar of wood or iron.    | 3-12. Part of a ship.                |
| 16-17. What artists learn to do. | 20-29. One.                          |
| 20-21. Fastened.                 | 5-27. Exchanging.                    |
| 24-25. Found on the seashore.    | 9-25. Sunk in mud.                   |
|                                  | 13-21. A boy.                        |

**compaiono le prime  
parole crociate nel  
New York World**



**un colpo di stato in Messico lascia sul terreno  
Francisco Madero e porta alla presidenza  
Victoriano Huerta**

SI QUIERE UD. VERDEB O COMPRAR, AGUDA A

"EL DIARIO,"

DES NUMEROSOS LECTORES SERRA SUS CLIENTES.

EL DIARIO

PERIODICO INDEPENDIENTE DE LA MANANA

REGISTRADO COMO DIARIO EN EL REGISTRO CIVIL, OCTUBRE 13 DE 1906.

ZAPATOS FINOS Y MUY DURABLES PARA NIÑOS Y JOVENES "EL ZAPATO REGAL" SANTA FE. N.

AÑO VIII NUM. 2,179

MEXICO, JUEVES 26 DE MARZO DE 1914

8 PAGINAS, 2 CENTAVOS

FEDERICO MISTRAL HA MUERTO AYER EN SU TAN AMADA PROVENZA

FUE UN DOLOR PARA BARCELONA Y TAMBIEN LA MUESTRA DEL POETA

Comunicacion especial para EL DIARIO. BARCELONA, martes 25.- Hoy murió el gran poeta de Provenza Federico Mistral, con setenta y tres años de edad y de gran fama.

La muerte de este hombre de la cultura y de la poesía, que fue el alma de la literatura catalana, es una pérdida para el mundo entero. El poeta había nacido en Iruya, en el Principado de Asturias, pero se trasladó a Provenza, donde vivió y trabajó hasta su muerte. Su obra es una de las más bellas y originales de la literatura moderna.

RESEÑA DE SU OBRA. Comunicacion especial para EL DIARIO. BARCELONA, martes 25.- Hoy murió el gran poeta de Provenza Federico Mistral, con setenta y tres años de edad y de gran fama.

EL MISTERIOSO HOMBRE DE LAS MIL LLAVES Y LA ULTIMA DE SUS NAZARAS

ACERCA A LA "TAMPAKE NEWS CO." LA CANTIDAD DE DIEZ MIL PESOS.

El misterioso hombre de las mil llaves, que ha sido el protagonista de una de las más curiosas historias de la época, ha sido visto recientemente en la ciudad de México. Se le ha visto en compañía de un grupo de personas que se supone que son sus cómplices en un negocio de gran importancia.

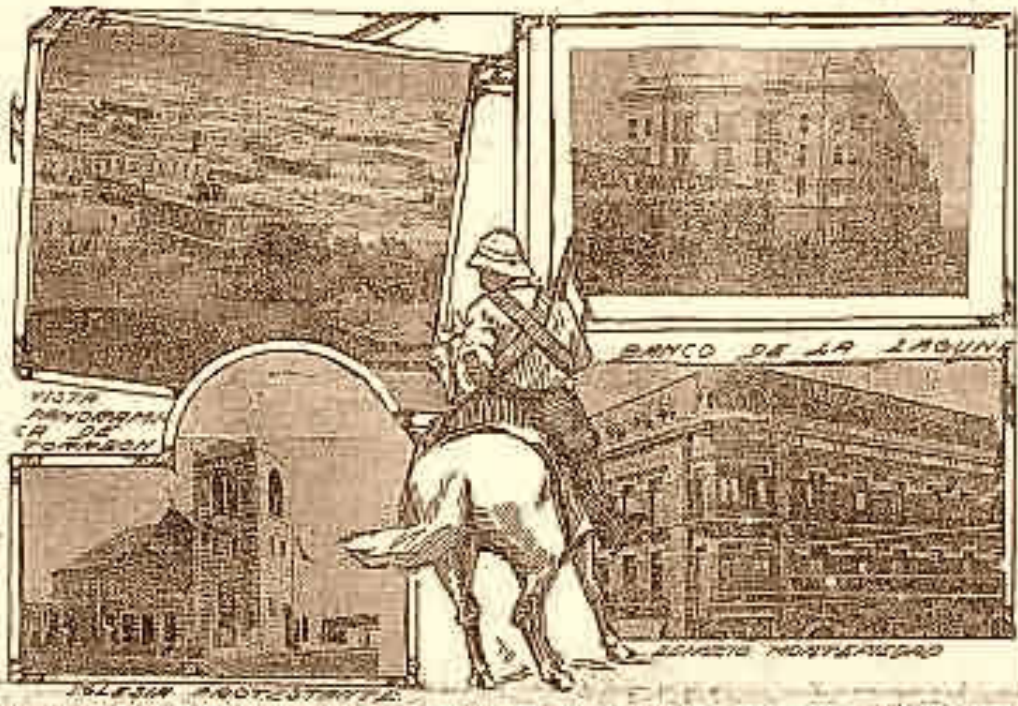
El caso tiene sus antecedentes en el tiempo de la guerra civil, cuando se le vio en el momento de ser capturado por las autoridades.

LO QUE HASTA HOY HA SUCEDIDO EN TORREON

LAS AVANZADAS REBELDES RETROCEDEN AL EMPUJE DE LAS FUERZAS DEL GRAL. VELASCO HASTA HERMEJILLO

LOS COMBATES PARCIALES ALREDEDOR DE TORREON FUERON RENIDOS Y DE RESULTADOS FAVORABLES PARA LAS ARMAS FEDERALES

LAS TROPAS DEL GENERAL DE VAYRE Y DEL GENERAL VILLAS HAN LLEGADO A REFORZAR LAS DE LA PODEROSA DIVISION DEL GRAL.



El Banco de la Laguna y la Iglesia Protestante en Torreon, Coahuila de Zaragoza.

EL TRAFICO ENTRE LAS PLAZAS DE SALTILLO Y MONTERREY FUE INTERRUPTIDO

PARQUE QUE UN STA. TRAMPA DE ENCONTRO UN GRUPO DE VERDEJES

El tráfico de mercancías entre Saltillo y Monterrey fue interrumpido por un grupo de rebeldes que se presentaron en el camino. Los rebeldes se apoderaron de un parque y se negaron a dejar pasar a los comerciantes.

Este hecho es una consecuencia directa de la guerra civil que se está librando en el norte del país. Los rebeldes buscan controlar las rutas comerciales para obtener recursos.

Se espera que el tráfico se reanude pronto una vez que se restablezca el orden en la zona. Las autoridades federales están trabajando para eliminar a los rebeldes.

ASESINO A UN HOMBRE CLAVANDOLE EL PALO DE UNA ESCOBA EN UN OJO

UN TORCEDIN SE DESARROLA EN UN BOSQUE CALABOZO DEL N. MEXICANO

Un hombre fue asesinado en un bosque de Calabozo, Nuevo México. El asesino clavó un palo de escoba en el ojo de la víctima. El crimen fue cometido durante una disputa por tierras.

El caso ha causado gran alarma en la zona. Las autoridades están buscando al asesino para llevar a cabo el proceso legal.

Se cree que el asesino es un hombre local que tiene un conflicto con la familia de la víctima. El crimen fue presenciado por algunos vecinos.

EN CINCO DIAS SUFRIÓ UNA POBRE MUJER 205 ATAQUES DE EPILEPSIA

ESTA VICTIMA DE TAN MUESTRO MAL MUERTO EN EL HOSPITAL

Una pobre mujer sufrió 205 ataques de epilepsia en cinco días. El caso es muy raro y ha causado gran interés médico. La mujer murió en el hospital debido a la intensidad de los ataques.

AYER FUE DADO DE ALTA EN LA CRUZ ROJA EL PERIODISTA SR. PASTORELLO

SE ENFERMO DE UN ATaque DE GRIPE QUE SE LE AGRAVÓ EN EL HOSPITAL

El periodista Sr. Pastorello fue dado de alta en la Cruz Roja después de haberse recuperado de un ataque de gripe. El caso fue muy grave y estuvo a punto de ser fatal.







**Pancho Villa conquista Torreón (1 ottobre)  
dopo una battaglia di tre giorni**



**Mohandas K Gandhi  
arrestato alla guida  
della marcia dei  
minatori indiani  
dopo l'inasprimento  
delle leggi razziali in  
Sud Africa  
(6 novembre)**

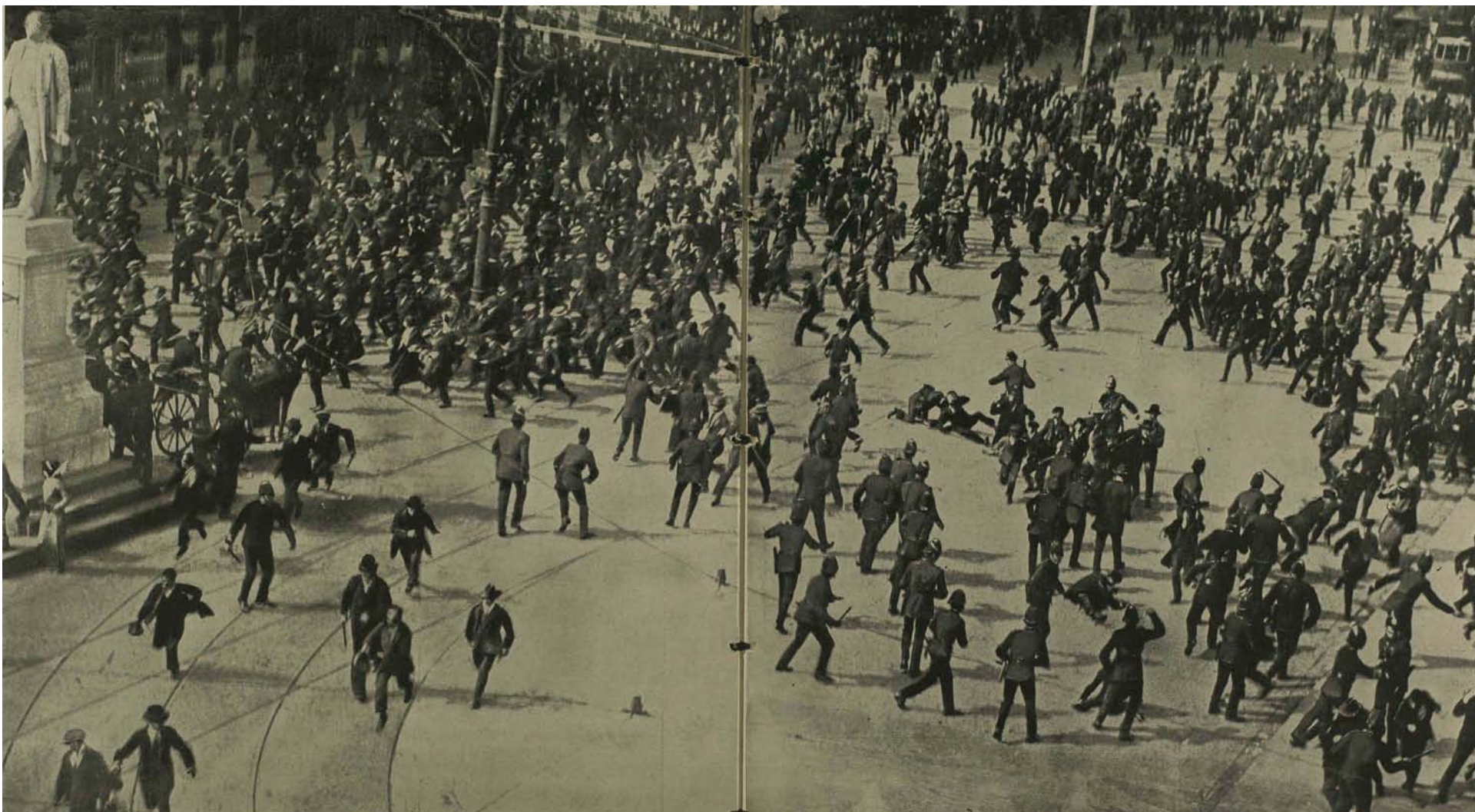




**Si apre il primo parlamento cinese a Pechino  
(8 aprile): i redattori della costituzione**

**Yuan Shikai si installa  
come primo presidente  
della Cina (10 ottobre),  
dopo aver fatto  
uccidere Song Jiaoren  
del Kuomintang,  
vincitore delle elezioni;  
si farà proclamare  
imperatore**





**bloody Sunday, Dublino, un morto e 400 feriti  
(31 agosto)**



**Ismail Enver Bey e Mehmed Talaat Bey:  
colpo di stato a Istanbul (1 Febbraio 1913)**



**Giorgio I re di Grecia assassinato a Tessalonica  
(18 marzo)**



THE BALKAN STATES  
With New Frontiers according to Treaties of London, Constantinople, & Bukharest.



col trattato di  
Londra (30 maggio)  
si conclude la prima  
guerra balcanica  
e il 16 giugno inizia  
la seconda guerra  
balcanica

**col trattato di  
Bucarest (10 agosto)  
si conclude la  
seconda guerra  
balcanica  
e viene creato lo  
stato di Albania**



**KLEPTOROUMANIA;  
OR, THE PINCH OF CHIVALRY.**

ROMANIA. "SIR, I WILL NOT STAND IDLY BY AND SEE THIS HELPLESS GENTLEMAN EXTINGUISHED."



**il patto Gentiloni apre il parlamento ai cattolici  
dopo il “non expedit”**



Suffragettes  
Parade 1913

*Official  
Program*  
**WOMAN  
SUFFRAGE**  
*Procession*



*Washington  
D.C.  
March 3, 1913*



**Woodrow Wilson firma The Federal Reserve Act (23 dicembre)**

Sixty-first Congress of the United States of America;

At the First Session,

Begun and held at the City of Washington on Monday, the fifteenth day of March,  
one thousand nine hundred and nine.

JOINT RESOLUTION

Proposing an amendment to the Constitution of the United States.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled (two-thirds of each House concurring therein), That the following article is proposed as an amendment to the Constitution of the United States, which, when ratified by the legislatures of three-fourths of the several States, shall be valid to all intents and purposes as a part of the Constitution:

"ARTICLE XVI. The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration."

*W. Lawrence*  
Speaker of the House of Representatives.

*J. S. Sherman*  
Vice-President of the United States and  
President of the Senate.

Attest:

*J. M. McDowell*  
Clerk of the House of Representatives.  
*Charles G. Bennett*  
Secretary  
*By Henry H. Gregory*  
Chief Clerk



il congresso USA  
approva il 16mo  
emendamento  
(3 febbraio)

TO BE FILLED IN BY COLLECTOR.

Form 1040.

TO BE FILLED IN BY INTERNAL REVENUE BUREAU.

List No. ....

### INCOME TAX.

File No. ....

District of .....

**THE PENALTY**  
FOR FAILURE TO HAVE THIS RETURN IN  
THE HANDS OF THE COLLECTOR OF  
INTERNAL REVENUE ON OR BEFORE  
MARCH 1 IS \$20 TO \$4,000.  
(SEE INSTRUCTIONS ON PAGE 4.)

Assessment List .....

Date received .....

Page ..... Line .....

UNITED STATES INTERNAL REVENUE.

## RETURN OF ANNUAL NET INCOME OF INDIVIDUALS.

(As provided by Act of Congress, approved October 3, 1913.)

RETURN OF NET INCOME RECEIVED OR ACCRUED DURING THE YEAR ENDED DECEMBER 31, 191....

(FOR THE YEAR 1913, FROM MARCH 1, TO DECEMBER 31.)

Filed by (or for) ..... of .....  
(Full name of individual.) (Street and No.)

in the City, Town, or Post Office of ..... State of .....  
(Fill in page 2 and 3 before making entries below.)

|  |    |  |  |  |  |
|--|----|--|--|--|--|
| 1. GROSS INCOME (see page 2, line 12) .....      | \$ |  |  |  |  |
| 2. GENERAL DEDUCTIONS (see page 3, line 7) ..... | \$ |  |  |  |  |
| 3. NET INCOME .....                              | \$ |  |  |  |  |

Deductions and exemptions allowed in computing income subject to the normal tax of 1 per cent.

|   |    |  |  |  |  |
|---|----|--|--|--|--|
| 4. Dividends and net earnings received or accrued, of corporations, etc., subject to like tax. (See page 2, line 11) .....  | \$ |  |  |  |  |
| 5. Amount of income on which the normal tax has been deducted and withheld at the source. (See page 2, line 9, column A) .. |    |  |  |  |  |
| 6. Specific exemption of \$3,000 or \$4,000, as the case may be. (See Instructions 3 and 19) .....                          |    |  |  |  |  |

Total deductions and exemptions. (Items 4, 5, and 6) .....

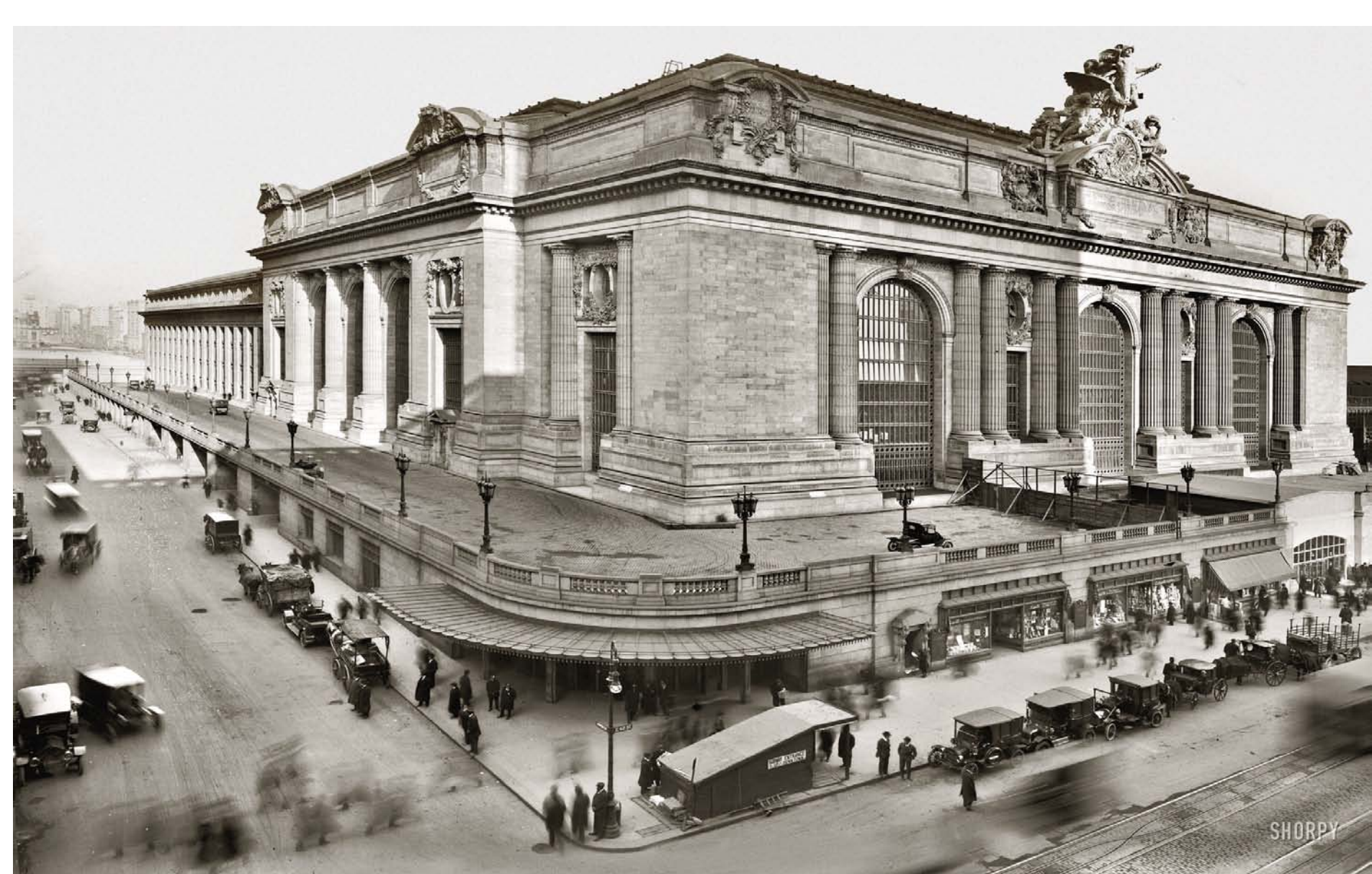
7. TAXABLE INCOME on which the normal tax of 1 per cent is to be calculated. (See Instruction 3). \$ .....

8. When the net income shown above on line 3 exceeds \$20,000, the additional tax thereon must be calculated as per schedule below:

|   | INCOME |  |  |  | TAX |  |  |  |
|---|--------|--|--|--|-----|--|--|--|
|   | \$     |  |  |  | \$  |  |  |  |
| 1 per cent on amount over \$20,000 and not exceeding \$50,000 ..... |        |  |  |  |     |  |  |  |
| 2 " " 50,000 " " 75,000 .....                                       |        |  |  |  |     |  |  |  |
| 3 " " 75,000 " " 100,000 .....                                      |        |  |  |  |     |  |  |  |
| 4 " " 100,000 " " 250,000 .....                                     |        |  |  |  |     |  |  |  |
| 5 " " 250,000 " " 500,000 .....                                     |        |  |  |  |     |  |  |  |
| 6 " " 500,000 .....   |        |  |  |  |     |  |  |  |
| Total additional or super tax .....                                 | \$     |  |  |  | \$  |  |  |  |
| Total normal tax (1 per cent of amount entered on line 7) .....     | \$     |  |  |  | \$  |  |  |  |
| Total tax liability .....   | \$     |  |  |  | \$  |  |  |  |

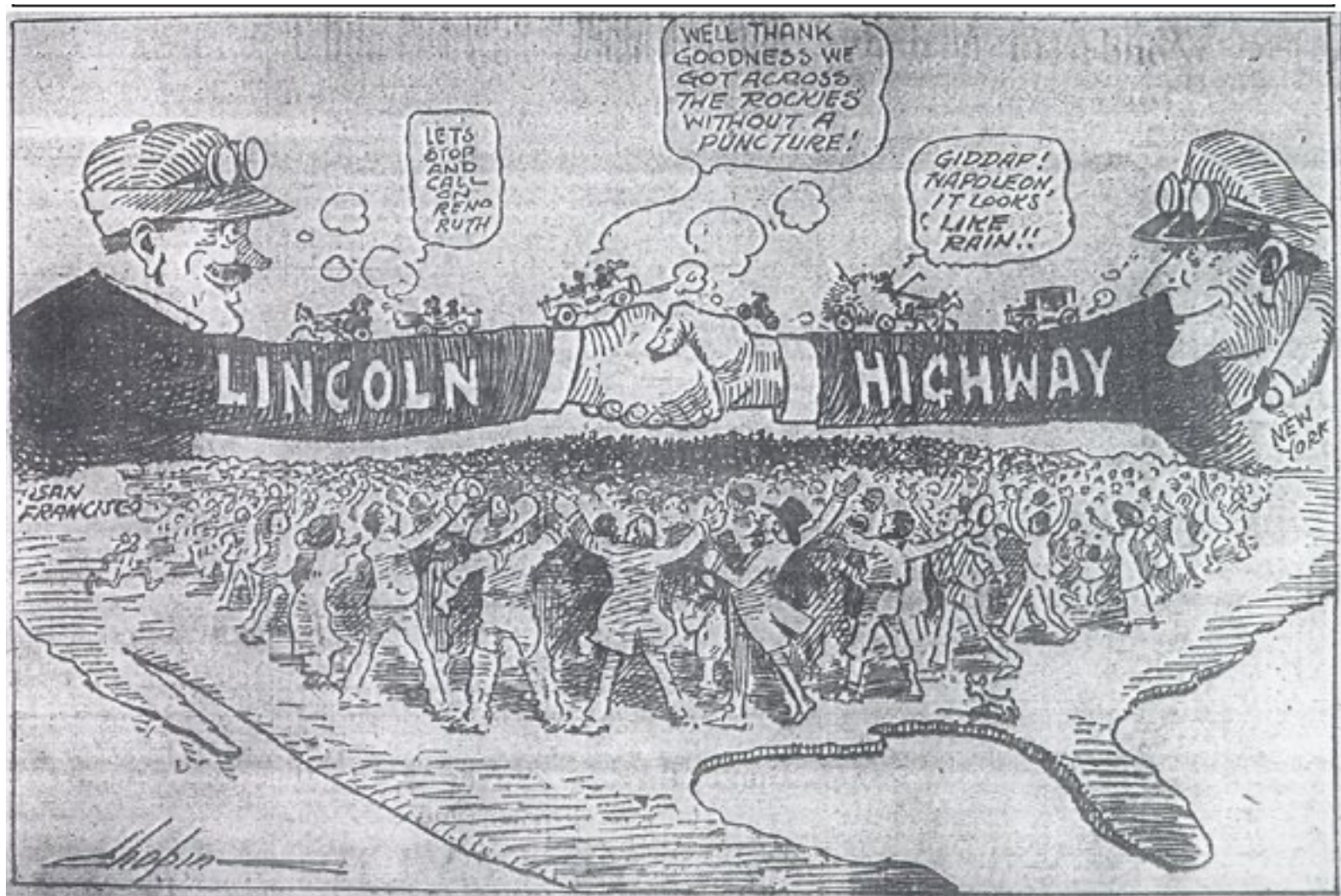
arrivano le tasse federali





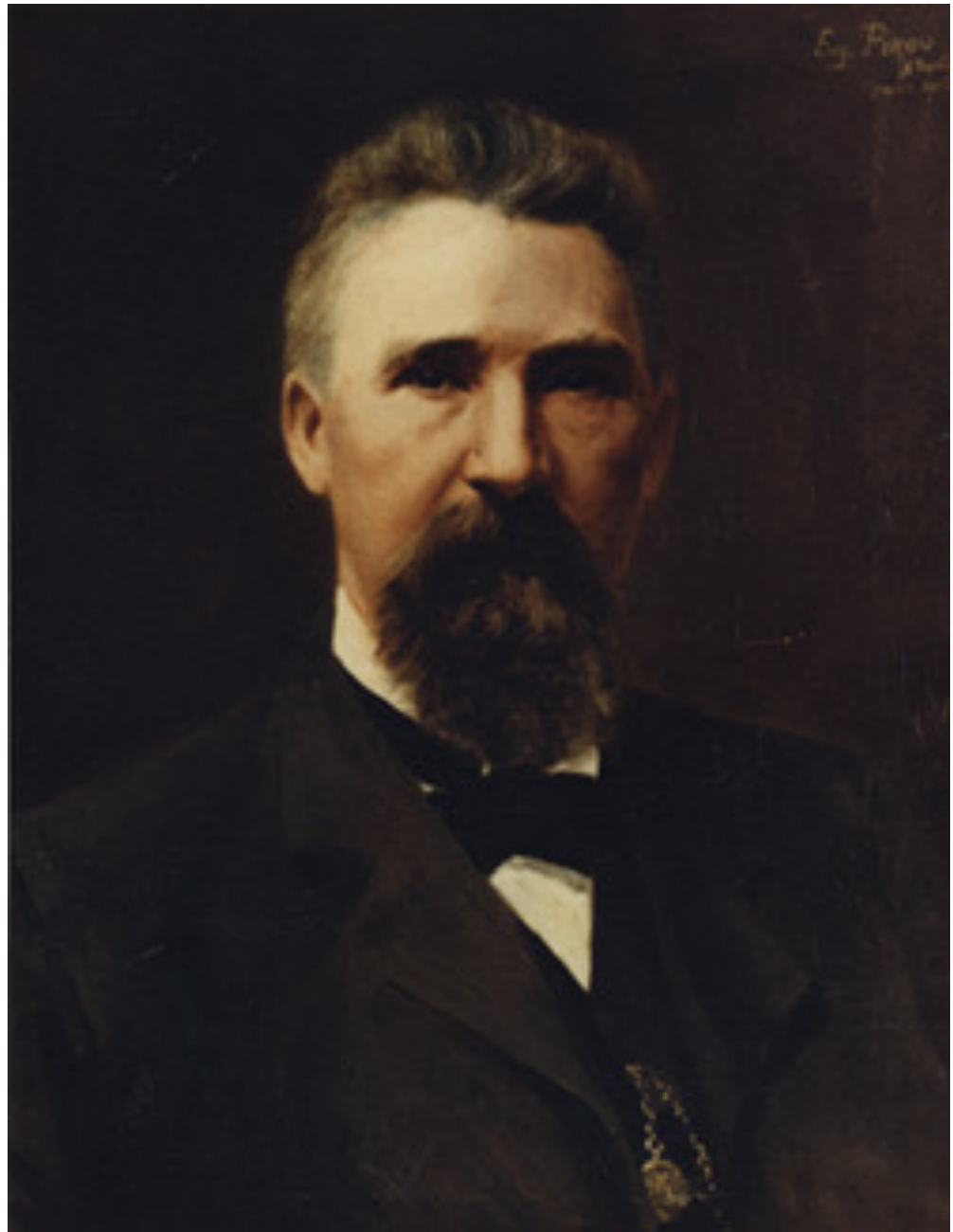
SHORPY

**apre il Grand Central Terminal di New York  
(2 febbraio)**



**viene dedicata la Lincoln Highway, la prima  
autostrada asfaltata americana da costa a  
costa (13 novembre)**

**Richard Joshua  
“R. J.” Reynolds**





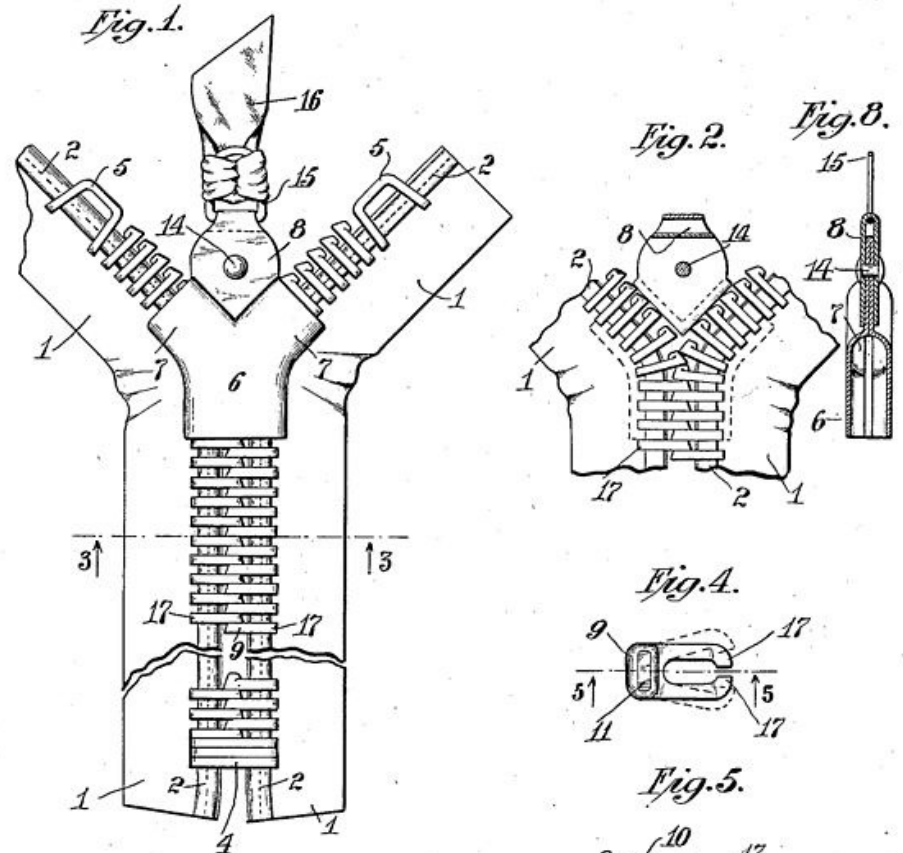
**Reynolds  
inventa il  
pacchetto  
di sigarette**

**Gideon  
Sundbäck**



1,219,881.

Patented Mar. 20, 1917.



Sundback  
inventor la "zip"

Fig. 3.  
Attest:  
*G. Sundback*  
J. D. Connolly, Jr.

Fig. 6.  
Fig. 7.  
Inventor:  
*Gideon Sundback.*  
by *Edwards, Lager & Wooster*  
Attys.

M. P. JACOB.

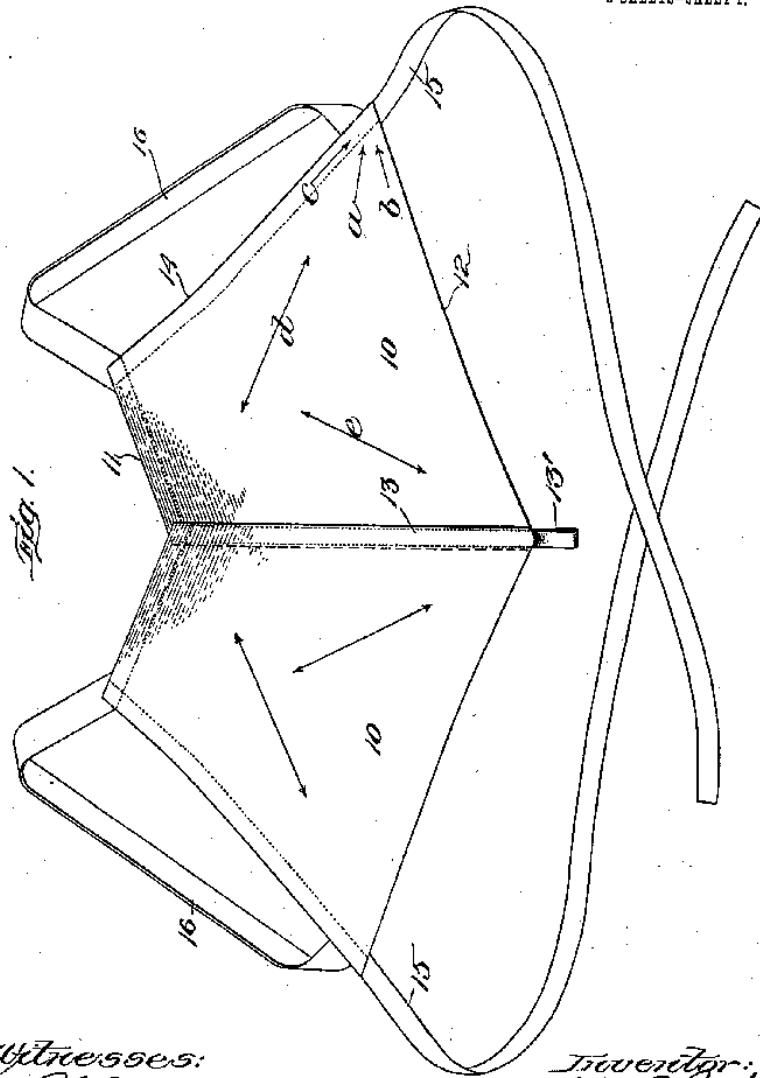
BRASSIÈRE.

APPLICATION FILED FEB. 12, 1914.

1,115,674.

Patented Nov. 3, 1914.

2 SHEETS—SHEET 1.



Witnesses:  
Ch. Brown  
Resford Rhodes

Inventor:  
Mary P. Jacob  
By Mitchell, Chadwick & Kent  
Attys.



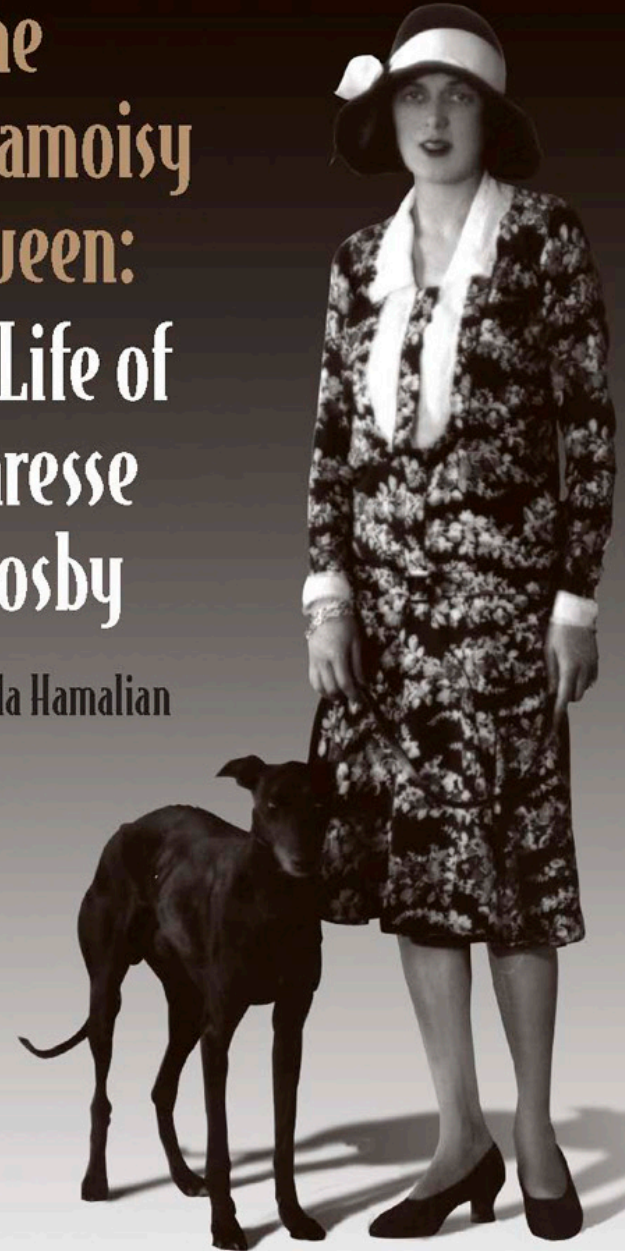
**Mary Phelps Jacob brevetta il reggiseno  
elastico**



**come Caresse Crosby  
diventa la  
“literary godmother to  
the Lost Generation of  
expatriate writers in  
Paris”**

**The  
Cramoisy  
Queen:  
A Life of  
Caresse  
Crosby**

Linda Hamalian





**Gabrielle “Coco”  
Bonheur Chanel  
apre a Parigi il suo  
primo atelier**



*fil rouge 5*

❖ **evocare lo *Zeitgeist* dell'epoca!**

*titolo 1*

**1913 l'anno delle rivoluzioni!**

*titolo 2*

**il XX secolo inizia nel 1913**



[pascolini@pd.infn.it](mailto:pascolini@pd.infn.it)  
<http://perlascienza.eu>

 @apascolini