



# information & the state

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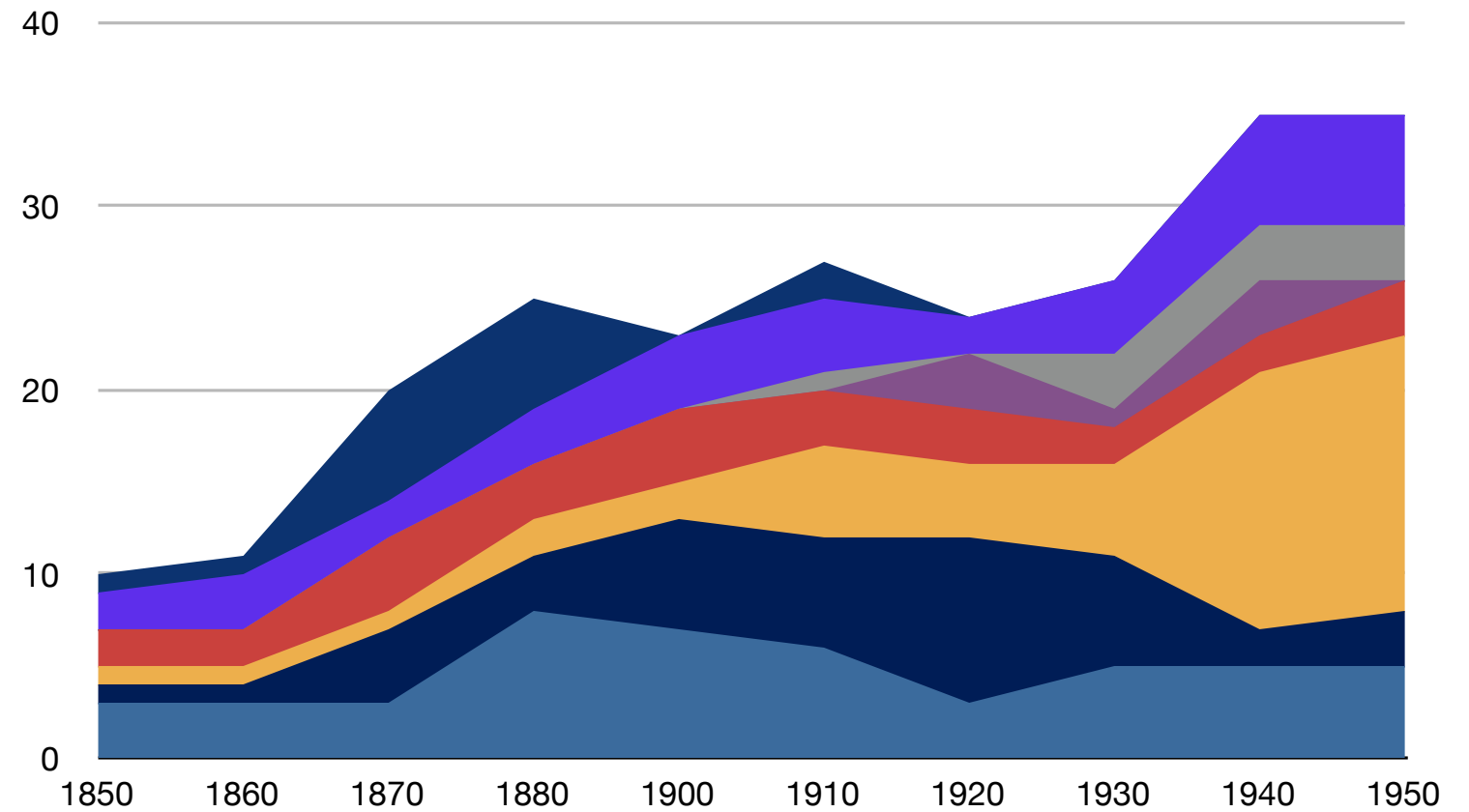
## **gathering and distributing**

concepts of information

March 9, 2010



US Census Questions 1850-1950 (rough)



- Persons
- Birth/Citizenship
- Occupation
- Education
- Language
- Military
- Household
- Health

**Persons**

Questions about the description of the persons, age, sex, color/race, children, birthday.

**Birth/Citizenship**

Questions about the country of origin of the person or their mother and father. Whether or not they have citizenship.

**Occupation**

Trade or profession, nature of the industry, employee or employer.

**Education**

School attended, can read/write?

**Language**

Mother tongue (often asked w/ birth/citizenship).

**Military**

Veteran of wars, benefits.

**Household**

Number in the family, relationship to the head of the family.

**Health**

Mental, disabilities.



March 8, 2010



## gathering or distributing?

Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, ... The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years

Dear Resident:

About one week from now, you will receive a 2010 Census form in the mail. When you receive your form, please fill it out and mail it in promptly.

Your response is important. Results from the 2010 Census will be used to help each community get its fair share of government funds for highways, schools, health facilities, and many other programs you and your neighbors need. Without a complete, accurate census, your community may not receive its fair share.

Thank you in advance for your help.

Sincerely,

Robert M. Groves  
Director, U.S. Census Bureau

Go to [2010census.gov](http://2010census.gov) for help completing your 2010 Census form when it arrives.

Quando reciba su formulario del Censo del 2010, visite [2010census.gov](http://2010census.gov) para obtener ayuda sobre cómo completarlo.

当您收到 2010 年人口普查表的时候, 如果需要帮助填写, 请查看 [2010census.gov](http://2010census.gov) 网站。

2010 년 인구조사 질문서를 받으신 후, 작성에 도움이 필요하시면 [2010census.gov](http://2010census.gov) 를 방문하십시오.

Khi nhận được đơn Thống Kê Dân Số 2010, xin vào địa chỉ mạng [2010census.gov](http://2010census.gov) nếu cần hướng dẫn cách điền.

Когда Вы получите анкету переписи населения 2010 г., информация на сайте [2010census.gov](http://2010census.gov) поможет Вам правильно её заполнить.



# beyond gathering?

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## **producing/manufacturing/making?**

"An immense amount of physical and intellectual work is needed to create even the most simple statistical fact--indeed, the simpler a fact is, the more refinement, and therefore the more effort, is necessary. This aspect was noticed early on in the history of statistics, not least by Charles Babbage: facts have to be *manufactured*"

John Agar, *The Government Machine*, 2003

## **or finding/gathering?**

"a basic resource"

Anthony Ottinger, "Information resources," 1980



# production: rival views

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## **centralization**

the 'organization of knowledge'  
*useful* information

## **open source**

"information wants to be free"  
Stewart Brand

## **Graham's law**

"People just produce whatever they want;  
the good stuff spreads, and  
the bad gets ignored"

Paul Graham, 2005



# back to law

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## **accuracy & organization**

"By the early 1680s, monopolists had begun to turn to the Court of Chancery seeking injunctions to restrain interference with rights conferred...

The first case, in 1681, related to ...

Stationers for the sole right to print statutes .... LC [Nottingham] granted injunction ... "the printing of the laws was a matter of state" in which accuracy was essential, but as far as concerned any other books .. he refused and injunction."

Norma Dawson, "English Trade Mark Law," 2003



# laws to law reports

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## **from market to hierarchy**

"It has long been considered a practicable scheme for any barrister and bookseller who unite together with a view to notoriety or profit, to add to the existing list of law reports."

"... indiscriminately reporting cases ... the enormous mass of constantly accumulating materials ... these evils .. attributable to .. the multiplication of contemporaneous Reports .. has arisen from applying the principle of competition to correct the evils of prolixity, delay, and expense incident to the system of authorized reporting. ... new evils created .. confusion and uncertainty in the law producing perplexity in the administration of justice.

-- W.T.S. Daniel, *History and Origin of Law Reports*, 1884



# contrasting freedoms?

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"Our most practical check upon existing abuses; and small is the error of giving too much information, in comparison of the guilt of withholding any."

--*Times*, 1828

"The public cannot have too much information."

--*Times*, 1882

"It was not wise to give too much information with regard to the business they had in hand, as it might not be to the advantage of the company."

--*Times*, 1867





# market & hierarchy

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**Philip II**  
1527-1598  
*el rey papelero*



**double-entry bookkeeping**

**Jean-Baptiste Colbert**  
1619-1683  
*erudition d'état*



# information & the state

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## **overview**

thematic issues:

government's role

*'gathering' information--'legible' state*

*distributing information-- 'legible' government*

historical developments"

17-18th century,

*Staatkunde*

18th - 19th century

government information, statistical societies

blue books & "moral statistics"



# making states

## An act concerning...

1. public archive
2. state printer
3. pilots for SF
4. comptroller
5. treasurer
6. Sec. of state
8. translator
11. AG
14. Supreme Court
30. incorporation of cities
36. commissioner of deeds
41. notaries
49. lawful fences
48. incorporation of towns
53. weights & measures
55. limited partners
59. recorder's office
64. officers of health
67. surveyors
69. librarian
72. register of wills
89. marks & brands
90. reporter
93. conveyances
95. common law
117. incorp. of colleges
123. assayer

Statutes of California, 1849-50



# making citizens

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## **name & address**

"This boy must be put through a few preliminary paces.

Name, Jo. Nothing else he knows on. Don't know that everybody has two names. Never heerd of such a think. Don't know that Jo is short for a longer name. Thinks it long enough for *him*. ... Spell it? No. ... Never been to school. ... What's home?

" ... 'This won't do, gentlemen!' says the Coroner."

Charles Dickens, *Bleak House*, 1853

**Scott & Co**  
what's in a name?



# making legible

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## **illegible to the state**

(and to the researcher)

from Pondicherry or Tamilnadu?

backward caste or scheduled caste

below or above poverty line

landowning or not

## **conquest of illegibility**

64 evidence

caste certificate

BPL certificate

patta/land certificate



# making legible



"sailors ... trace their family .. .names  
upon the wrist ... If it were possible  
for such a practice to become  
universal ... Who are you? ... no room  
for prevarication in the answer ... men  
were thus held as it were by  
an invisible chain."

Jeremy Bentham,  
*Principles of Penal Law* [1843]





CENSUS OF 1864.

STATES AND TERRITORIES.

	Whites	Free colored	Slaves	Total
Maine.....	281,413	1,246		282,659
New Hampshire.....	257,426	9,788		267,214
Massachusetts.....	585,479	19,954		605,433
Rhode Island.....	143,875	2,479		146,354
Connecticut.....	361,888	7,923		369,811
Vermont.....	272,499	719		273,218
New York.....	2,099,245	49,889		2,149,134
New Jersey.....	693,339	21,466	578	714,923
Pennsylvania.....	2,524,766	22,625		2,547,391
Delaware.....	71,439	14,974	3,386	89,809
Maryland.....	417,243	74,719	89,264	581,226
Virginia.....	832,886	24,388	177,264	1,034,538
North Carolina.....	552,829	27,499	179,249	759,577
South Carolina.....	374,563	6,997	341,291	722,851
Georgia.....	522,579	2,339	341,491	866,409
Kentucky.....	399,413	24,914	229,891	654,218
Tennessee.....	726,836	6,493	229,429	962,758
Ohio.....	1,862,828	21,972		1,884,800
Indiana.....	977,122	11,962		989,084
Mississippi.....	392,718	238	289,874	682,830
District of Columbia.....	27,811	18,829	2,097	48,737
Illinois.....	862,882	2,421		865,303
Michigan.....	262,971	2,263		265,234
Louisiana.....	252,491	17,461	244,999	514,951
Missouri.....	329,264	2,419	97,437	429,120
Alabama.....	432,734	2,712	212,944	648,390
Arkansas.....	262,199	689	47,189	310,077
Florida.....	47,263	623	28,209	76,095
Wisconsin.....	261,739	673		262,412
Iowa.....	194,994	243		195,237
Texas.....	254,674	227	28,363	283,264
California.....	91,422	912		92,334
Minnesota Territory.....	6,834	29		6,863
New Mexico Territory.....	21,262	112		21,374
Oregon Territory.....	12,492	117		12,609
Utah Territory.....	11,239	24	25	11,288
Aggregate.....	13,522,094	434,095	2,264,213	16,220,402

gathering

registration

population

property

67. surveyors

trade

93. conveyances

standards

53. weights & measures



# registration: population

"And it came to pass in those days, that there went out a decree from Caesar Augustus that all the world should be taxed. ... And Joseph also went up from Galilee, out of the City of Nazareth, into Judaea, unto the City of David, which is called Bethlehem; (because he was of the house of David:) to be taxed with his espoused wife, being great with child."

Luke, 2, 4-5

**Nazareth 0**

...

taxpayers

aliens

racial groups

the poor

military eligible

professions

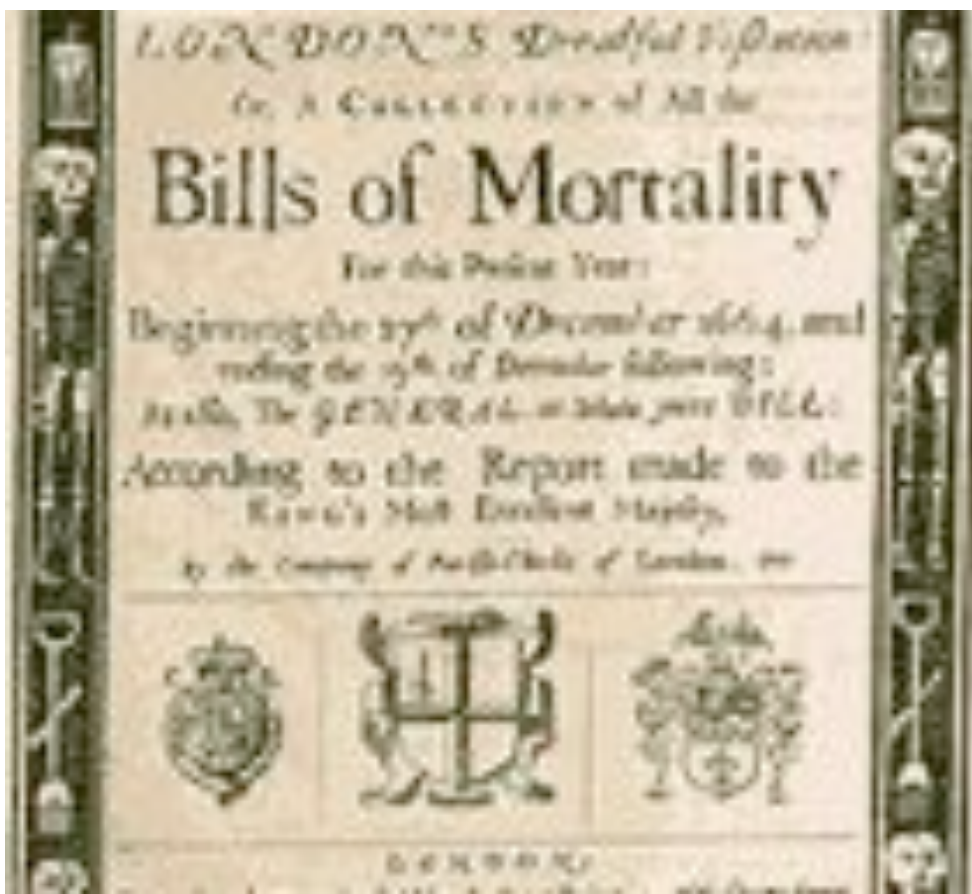
midwives

prostitutes

cars

'National Insurance'





# registration

**births, marriages, deaths**  
bills of mortality

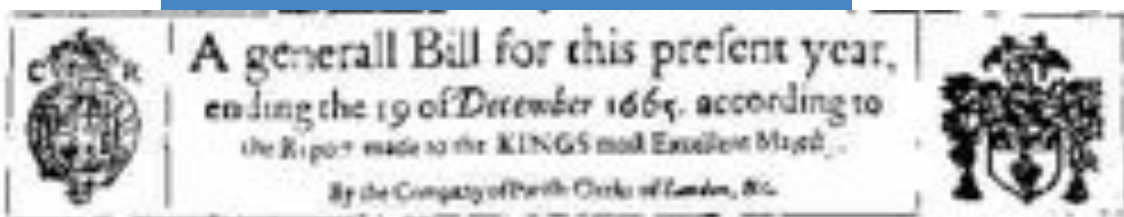
**1603:** regular bills of mortality

**1611:** incorporation of parish clerks counting by "searchers"

**1629:** other deaths

**1728:** age of deceased

**1837:** last bills/regulation act



*The Deaths and Causes this year,*

<b>A</b> Beehive and Silkworms — 819	Excessive — 11	Pallo — 20
Agred — 1545	Flux and Scall Pox — 655	Plague — 47,128
Ague and Fever — 4957	Found dead in Streets, Fields, &c. — 1	Plaster — 6
Apples and Souldry — 120	French Pox — 28	Piercing — 48
Bacne — 45	Furberd — 23	Pintling — 4
Calid — 9	Goya and Scissa — 27	Quint — 38
Bleeding — 28	Grief — 47	Rickets — 137
Bloody Flux, Scouring & Flux — 284	Griping in the Guts — 128	Rising of the Legges — 167
Burnt and Scalded — 8	Hanged & made away themselves — 7	Rupture — 24
Calumny — 3	Hedon, Idiot & Madfollies — 14	Starvy — 107
Cancer, Gangrenes, and Fists — 18	Jandies — 10	Wangles and Swellings — 2
Cancer, and Thrush — 11	Impossime — 127	Wines, Meats, broken and broken — 18
Childbed — 625	Kill by several accidents — 48	Limb — 28
Christmas and Infants — 1258	Kings Bill — 28	Spleen — 14
Cold and Cough — 85	Leprole — 2	Spotted Fevers and Purples — 1208
Colick and Waste — 814	Leishtry — 14	Stopping of the Urinary — 238
Consumption and Thick — 488	Livertines — 18	Stout and Starvy — 18
Croup and Measles — 1038	Measles and Bradish — 4	Swell — 101
Difficultie — 1	Mortals — 7	Teeth and Worms — 214
Dropsie and Turpency — 1478	Mouthred and Swell — 4	Vomiting — 21
Drowned — 5	Overheat & Starved — 45	Worm — 2

Of Males — 1114	Of the Plague — 47,128
Of Females — 4851	
In all — 5965	

Printed in the Bills in the 15th Parliament and in the Parliament's year — 70000  
 Printed of the Plague in the 15th Parliament and in the Parliament's year — 47,128





# political arithmetic



William Petty  
1623–1687

## politics and population

### **William Petty, RS**

surveyor

*Political Arithmetic of Ireland*

velocity of circulation  
natural vs market price  
economic surplus  
population change



*An Extract of two Essays in Political Arithmetick concerning the comparative Magnitudes, &c. of London and Paris by Sr. William Petty Knight. R. S. S.*

The excellent Author of these two Essays, has in several former of the same Nature made it appear that Mathematical Reasoning, is not only applicable to Lines and Numbers, but affords the best means of Judging in all the concerns of humane Life. In the present he endeavours to prove *London*, as it now is, the most considerable City now in being, by shewing it much to exceed *Paris*, (which not only the *French* but foreigners have asserted to be the chief City of *Europe*.) both in People, Housing, and Wealth:

*A further Assertion of the Propositions concerning the Magnitude, &c. of London, contained in two Essays in Political Arithmetic; mentioned in Philos. Transact. Numb. 183; together with a Vindication of the said Essays from the Objections of some Learned Persons of the French Nation, by Sr. W. Petty Knt. R.S.S.*

1. **I**T could not be expected that an Assertion of *Londons* being bigger than *Paris* and *Roven*, or than *Paris* and *Rome* put together, and bigger than any City of the World, should scape uncontradicted, and 'tis expected that I (if continuing in that Perswasion) should make some Reply to these contradictions.

2. I begin with the Ingenious Author of the *Novelles de la Republique des Lettres*, who saith that *Rey* in *Persia* is far bigger than *London*; for that in the 6th. Century of Christianity (I suppose *An. 550*) It had 15000, or rather 44 thousand *Moschees* or *Mabometan Temples*. To which I reply, that I hope this Objection is but in jest, for that *Mohomet* was not

whereby he  
of *Paris*  
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found  
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# competitive counts

counting against the French

counting against 'declinists'

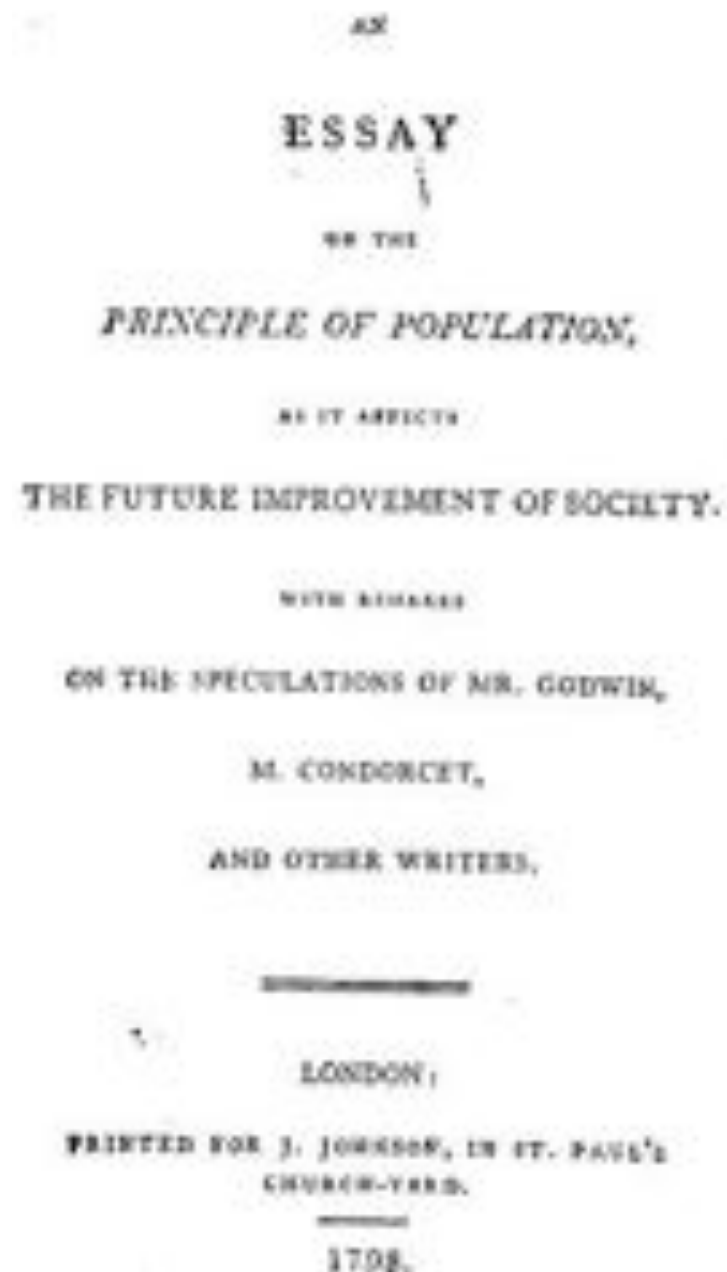
slave vs free states

"Where there is room for more people they will always arise, even without naturalization bills"

"On the Populousness of Ancient Nations"  
David Hume, 1742



# decline to abundance



"In Britain, however, the first census was taken, not out of a constitutional requirement, but as a way of resolving the Malthusian population controversy ... The 1800 Census Act was designed principally to determine whether or not the population was actually increasing."

Martin Campbell-Kelly, "Change in the British Census," 1996





# registration:property

tax rolls: Domesday 1086

maps/addresses

*national*

*naval*

*transnational*

cadastres

Portugal, 1756

France

Napa







A.—Classified list of Letters Patent granted during the year 1839, with the names of patentees, place of residence, and date of patent.

CLASS I. AGRICULTURE, INCLUDING INSTRUMENTS AND OPERATIONS.

Inventions or discoveries.	Patentees.	Residence.	When issued.
Bee-hives	Samuel C. Myers	Mount Pleasant, Pa.	July 22
Bee-hives	John Sholl	New York	November 29
Bee-hives	William M. Hall	Wallingford, Ct.	December 27
Binding grain	Israel Keyes	Putney, Vt.	July 17

registration

PATENTS

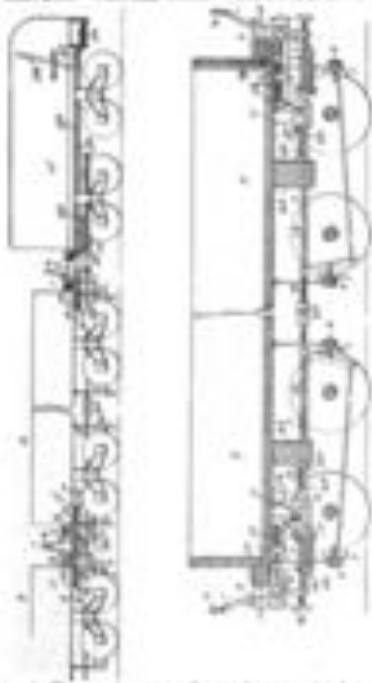
GRANTED SEPTEMBER 8, 1898.

property: IP  
patents

copyrights

trade marks

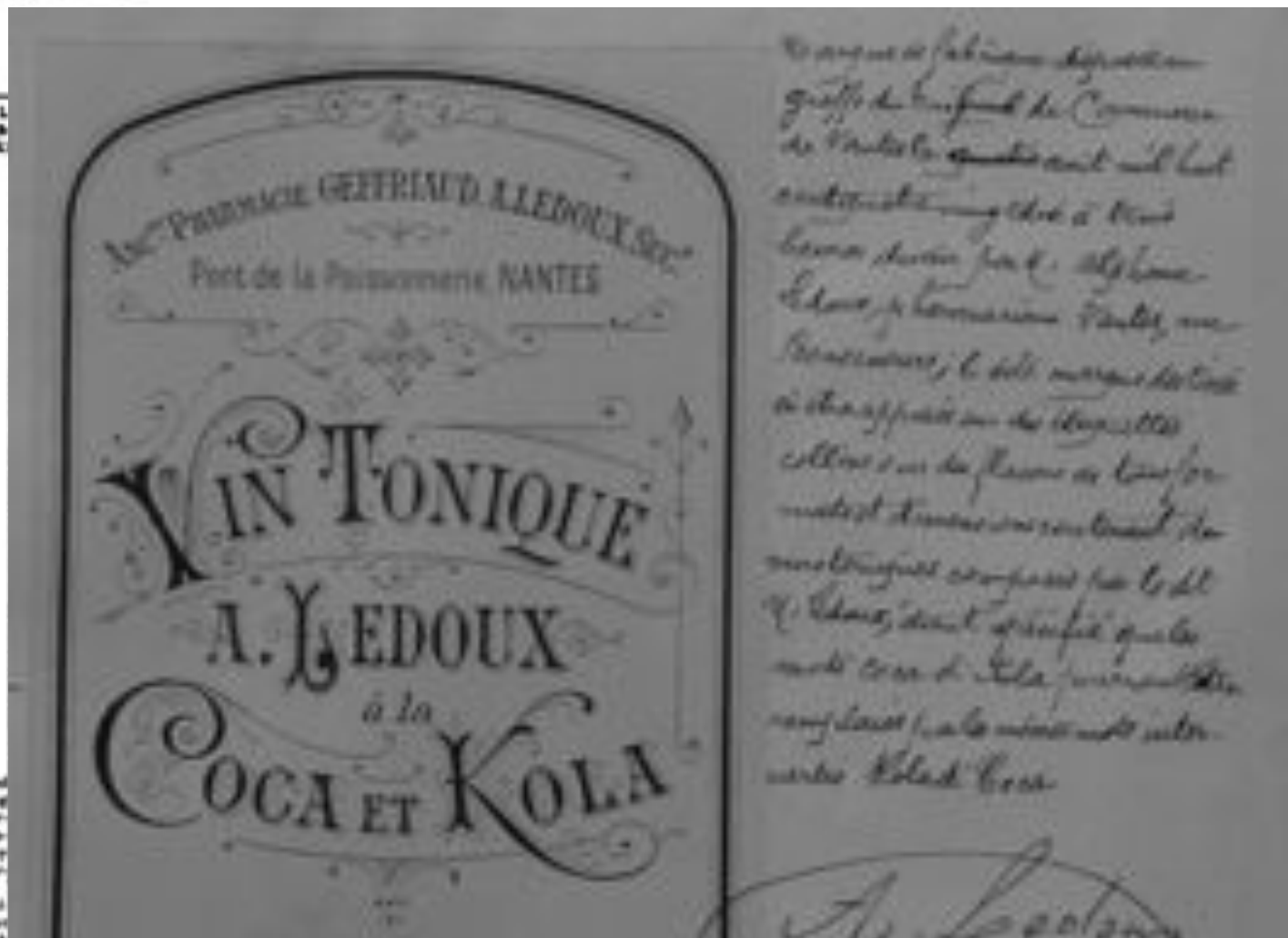
D.O. & S. B. CARPENTER, William B. Carpenter and George L. Carpenter, Inventors, of New York in U. S. Pat. No. 624,942. (No model.)



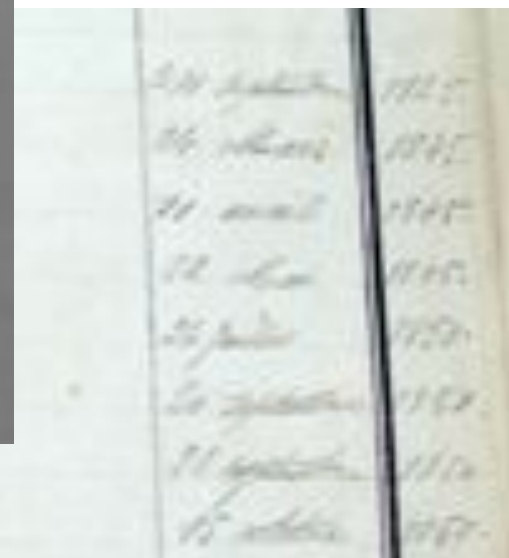
Claim 1.—The combination of a car having a brake provided with a brake rod, an operating lever mounted on the car and having one end connected with said brake rod and extending upward and having its upper end arranged to engage a similar operating lever of another car, and means for shifting the fulcrum of the lever, whereby the brake will be released and the lever will be prevented from operating substantially as described.

2. The combination of a car, a brake having a brake rod, a fulcrum bar mounted on the car and having a longitudinal groove or flange, an operating lever fulcrumed to said bar and connected with the brake rod, a gravity lock lever arranged to engage the fulcrum bar to prevent the same moving upward, and means for disengaging the lock lever from the fulcrum bar, substantially as described.

3. The combination of a car, a brake having a brake rod, a longitudinally movable fulcrum bar mounted on the car, a lock lever arranged to engage the fulcrum bar to lock the same against longitudinal



1182 No. 62,492 (No model.)







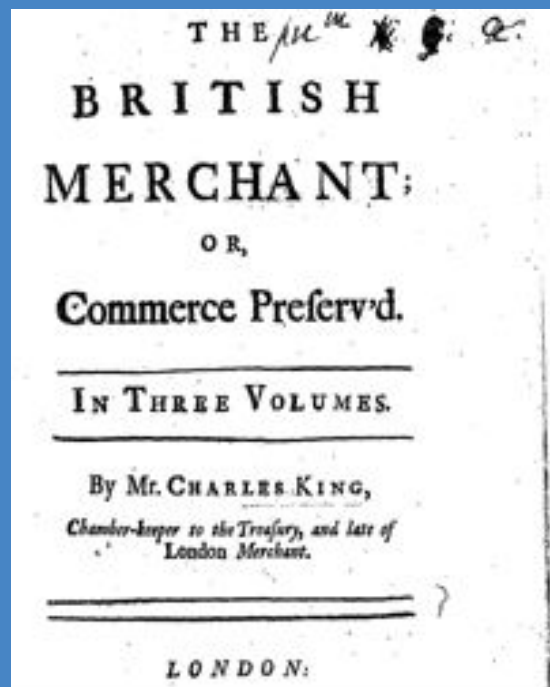
# trade

## customs & excise

### the search for statistics

"apprehension of the wrong balance of trade, appears of such a nature, that it discovers itself wherever one is out of humour with the ministry, or is in low spirits."

--David Hume, "Of the balance of trade," 1758



To sum up all, if we pay to France yearly,	
For their Wines	450000
For their Brandies	70000
For their Linen	600000
For their Paper	30000
For their Silks	500000
	<hr/>
	1650000
And they take from us in Lead, Tin, Leather, Alum, Coppers, Coals, Horn-Plates, or. and Plantation-Goods, to the Value of	200000
	<hr/>
Great Britain's losses by the Balance of that Trade yearly	1450000
	<hr/>



# internationalization



## **government conventions**

*time*

Greenwich 1852; Meridian, 1884

*distance*

*IP*

Paris, 1883; Berne, 1886; Madrid, 1891

*weather*

"Brussels convention [1853] on naval meteorology had created a widely used standard meteorological logbook for ships at sea .. the oldest continuous quasi-global meteorological record" -- Paul Edwards, Meteorology as



# a century of statistics

**government**

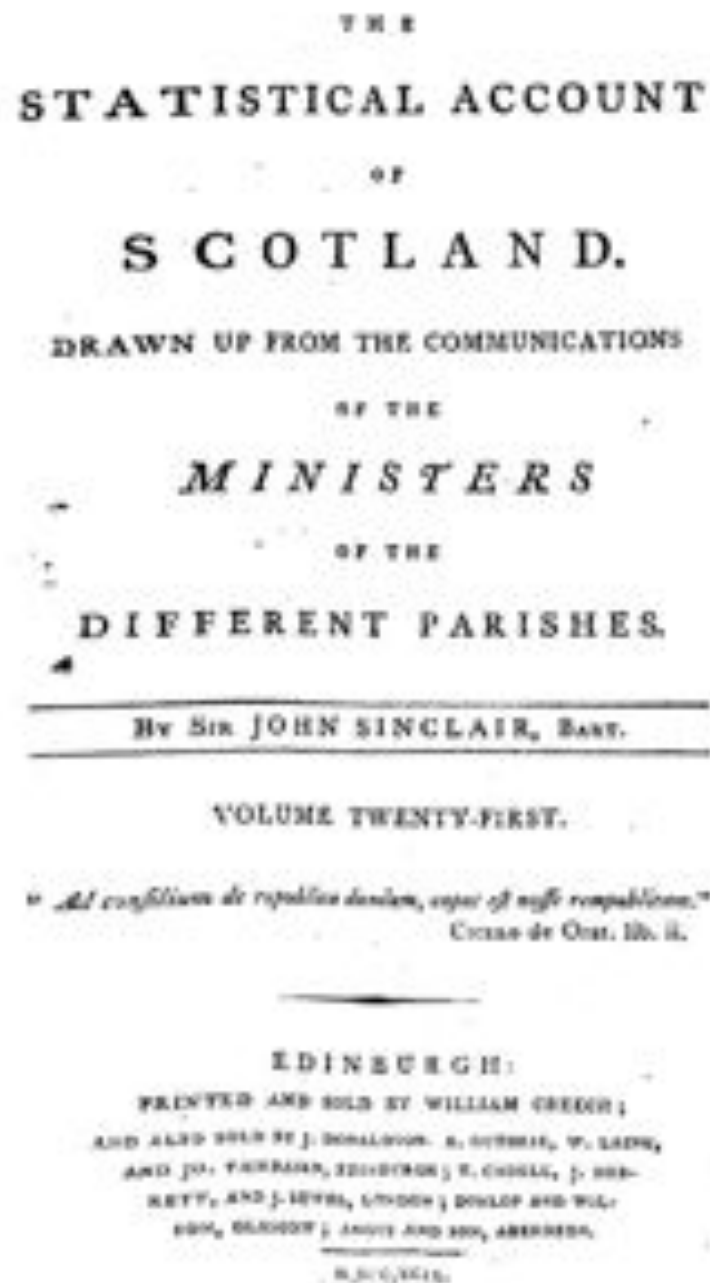
**civil society**

"useful knowledge"

agricultural improvement:

"May commons be uncommon"

John Sinclair, *The Statistical Account of Scotland*, 1791-99





# a century of statistics

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## **parliamentary information**

**gathering:**

"Mr Burke reprobated the Ministry for having refused to lay before the House the papers which had been required; and objected to Major Scott, a gentleman in the army, giving any official information to that House, which, he thought, would have been more proper for the Chairman of the Committee, or from some of the Directors themselves" 1785

**distributing:**

**Hansard, monopoly**



# a century of statistics

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"the public at large remain without information and without interest ... or if they have any knowledge of them, it is but a dilettante knowledge, like that which people have of the mechanical arts who have never handled a tool.

John Stuart Mill  
*Considerations on  
Representative  
Government, 1862*

**the "incontinent printer"**

Parliamentary Commissions  
& Blue Books

**wars, colonies, trade**

**"moral statistics"**

poor law  
child labour  
factories acts  
mines  
sanitary conditions  
Welsh education ...



# national schoolmaster

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"the provincial editor is in some sort a schoolmaster; granted: but who will guarantee his capacity? It is idle to say that in the competition of the market he who supplies the best information on national affairs will have the most customers. Experience proves the contrary: the statistics of journalism show the fact to be other wise. A thorough knowledge .. can only be obtained through a study of the opinions held, and of the facts collected, by those who have given them time and thought. These facts and opinions are only to be found .. in ... those fifty or sixty annual volumes of Parliamentary Blue Books. A writer may doubtless pick up a good deal of general information ... but a full and accurate comprehension .. is not to be gathered sat second-hand"

Lord Stanley, *What Shall We Do with Our Blue Books?*



## what was learned?

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"Leonard Horner was one of the Factory Inquiry Commissioners in 1833, and Inspector, or rather Censor of Factories till 1859. He rendered undying service to the English working class. He carried on a life-long contest, not only with the embittered manufacturers, but also with the Cabinet, to whom the number of votes given by the masters in the Lower House, was a matter of far greater importance than the number of hours worked by the 'hands' in the mills."



# US publications

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## **early 19th century**

*gathering*

discoveries, explorations, mapping  
expeditions ...

*distribution*

government patronage

## **civil war**

Owen, Howe, McKay

*American Freedman's Inquiry Commission*

1863–





# rival gatherings

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"If the parties  
who act contrary  
to their interest  
had a proper  
knowledge of that  
interest, they  
would act well."

*Encyclopaedia  
Britannica, 1824*

**SPCK  
SDUK**

"A more general diffusion of accurate knowledge  
regarding the state of public affairs would tend  
to check that excitement and party spirit which  
has often been created by misrepresentation or  
exaggeration, and has produced an annoyance to  
the government and at least a temporary  
disaffection of the public mind."

William Jacob, "Observations and Suggestions,"  
1832



# rival gatherings

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## amateur ethnography

### **Royal Statistical Society, 1833**

"the first and most essential rule of its conduct  
to exclude all *opinions*" -- Richard Jones, 1833

## **battling opinions**

London SS v Manchester SS  
urbanization v industrialization

*The Moral and Physical Condition  
of the Working Classes*



# all opinions

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## **Social Science Association, 1857**

"volunteer legislators of Great Britain ..  
brings together persons of all opinions  
consistent with the profession of a desire  
for social improvement" --J.S. Mill

"to take up the raw materials of social  
legislation, and by the help of  
statistics ... to reduce the 'hard facts'  
to the condition of manageable matter"

*Telegraph*



# government machines

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## **Babbage, Kelvin, Hollerith, Burroughs**

### **telegraphs**

"Telegraphs are machines for conveying information ... generally been established for the purpose of transmitting information during war"

Charles Babbage, *On the economy of machinery and manufactures*, 1832

**typewriters, telephones, punch cards ...**



# government categories

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**enemies**

**aliens**

**deviants**

**criminals**

**anti-social**

"the government of our Fürher

... is statistics friendly"

--Frederick Zahn

President of the Bavarian statistical office

Cofl10-- State 36