2591

Form 183–10000–11–17.

THE AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS
33 West 39th Street, New York

PERSONAL CLASSIFICATION SHEET

Read pages 2, 3 and 4 before filling out this blank

Please return this sheet with your data, even if you have filled out similar blanks for other organizations

Name in full Hering, Carl — Date Dec. 11 1917
(Surname) (First name) (Second name)

Mail address 210 Seventh 13th st
(Number) (Street)

Phila Pa
(City) (State)

Telegraph address Phila Telephone No. Filbert 474 Married? no Dependents? yes
(If widower answer no.)

Occupation or position consulting electrical engineer

Name of employer none

Location as above

Kind of business consulting

Birth: Year 1860 Country U. S. When naturalized? —

Citizen of what country? U. S.

Physical condition good for my age

Education { Common School / High School / Private sch. X } College Univ. of Pa (Name of College) Course M. E. Year graduated 1880 Degree B.S., M.E., D. Sc.

Member of what engineering and technical societies? A.I.E.E., A.S.M.E., A.I.E.S., Engrs Club Phila. etc.

What foreign languages do you speak? French & German Fluently? no Read yes

In what countries have you resided and what years? France & Germany for a short time.

In what countries traveled extensively? None

What military or naval training? none

Are you in active service or reserve? no Rank? none

Member of what war committees? none

Please *review carefully* pages 2, 3 and 4, and enter in the following spaces brief descriptions and symbols of the leading specialties in which you have had *considerable experience*. For example, the symbols for an inspector of underground electrical transmission systems would be "A7, B12, Fa 1b."

Specialties in which you have had greatest experience (This table is for indexing purposes)	Symbols of Specialties
	A7, 24, 27
Testing, research work, in electrical & physics	B2, 6, 7, 23, 28
Thermal engineering, electric furnaces	I 7a
	M 5, N 4, Z 6

Other Specialties

INDUSTRIAL AND PROFESSIONAL EXPERIENCE

Check (✓) each division in which you have had sufficient experience to be of service. Use blank spaces as needed.

A BRANCHES OF ENGINEERING.

1 Aeronautics
2 Automotive
3 Architecture
4 Ballistics
5 Chemical
6 Civil
✓ 7 Electrical
✓ 8 Gas
9 Heating and Ventilating
10 Hydraulic
11 Illuminating
12 Marine
13 Mathematics
14 Mechanical
15 Metallurgy
16 Metallography
17 Machine Shop Practice
18 Mill (Textile, etc.)
19 Military
20 Mining
21 Municipal
22 Naval Architecture
23 Navigation
✓ 24 Patent Law
✓ 25 Power
26 Public Utility Service
✓ 27 Physics
28 Railroad
29 Safety, Fire Prevention
30 Telegraph, Telephone (see *E* 1-6)
31 Welfare Work
32

B POSITIONS HELD IN "*A*".

Check the most important positions you have held, and follow by number of the branch checked under "*A*."
For example, a consulting heating and ventilating engineer should mark the list below as follows:
"✓ 2 Consulting Engineer *A* 9."

1 Appraiser
✓ 2 Consulting Engineer
✓ 3 Constructing Engineer
4 Contractor
4*a* Department Manager
5 Designer of Apparatus or Machinery
5*a* Designer of Plant
5*b* Economist
✓ 6 Draftsman
✓ 7 Editor
8 Erecting Engineer
9 Estimator
10 Executive, general
10*a* Foreman
11 Industrial Engineer
12 Inspector
13 Laboratory Chief
13a Laboratory Assistant
14 Manufacturer
15 Master Mechanic
16 Office Executive
17 Operating Engineer
18 Organizing Engineer
19 Production Engineer
20 Publicity Engineer
21 Purchasing Agent
22 Rate Setter
✓ 23 Research Engineer
24 Sales Engineer
25 Sales Manager
26 Specification Engineer
27 Superintendent
✓ 28 Teacher
✓ 29 Testing Engineer
30 Works Manager
31 Writer
32
33

RECORD OF EXPERIENCE.

Please give below an account of your engineering and technical experience, bringing out in particular any line in which you are especially proficient.

Give approximate dates of your experience in each case—*this is most important.*

Teacher in physics, electricity, several years (1882, 3, 7)
Designer of electrical apparatus several years (1883–5)
Consulting, testing, research, reports, chiefly electrical
about 30 yrs (1887 to date)
Electric furnaces, thermal engineering 5–10 yrs (1905 to date)
Editor, compiler, wrote several books, (1887 to date)

Continue on a separate sheet if necessary.

I have filled out quite a number of similar blanks.

INDEXING SCHEDULE

EXPERIENCE IN DETAIL

Check each subdivision in which you have had experience, adding subdivisions and sub-subdivisions as needed.
Your entries in the following schedule are for indexing purposes.

C AGRICULTURAL MACHINERY AND IMPLEMENTS
(Including Farm Tractors and the Application of Electricity)
1
2

D AVIATION
1 Aeroplanes
2 Hydro-aeroplanes
3 Balloons and Dirigibles (Including Production of Hydrogen)
4 Engines
5 Fuselages and Planes
6 Parts and Instruments
7

E COMMUNICATION
1 Cables
2 Signal Systems
3 Telegraph
4 Telephone
5 Radio
6 Light Rays
7

F ELECTRICAL APPARATUS
See also *I*-7, *M*-5, *N*-4, *R*-4, *S*-1, *U* & *Z*
1 Generators
2 Motors and Converters
3 Transformers
4 Lamps (see *Ha*)
5 Batteries
6 Controlling Devices
7 Magnets and Solenoids
8 Switchboards
9 Heaters
10 Rectifiers
11

Fa ELECTRICAL TRANSMISSION AND DISTRIBUTION
1 Transmission Systems
a Overhead
b Underground
2 Distributing Systems
a Overhead
b Underground
3 Circuit Protection
4 Wiring of Buildings and Ships
5 Wires and Cables
6

G FUELS AND COMBUSTION
(See also *Q*, Oil and Gas Supply)
1 Coal
2 Coke
3 Low-grade Fuels
4 Blast-furnace and Coke-oven Gas
5 Producer Gas
6 Boiler Furnaces
a Stokers
b
7 Industrial Furnaces
8 Oil-burning Equipment
9 Powdered-fuel Equipment
10

H HEATING AND VENTILATING
1 Hot-air
2 Steam and Hot-water
3 Vacuum Systems
4 Ventilating Systems
5 Air-conditioning
6 Central Plants
7

Ha LIGHTING
(Electricity, Gas, Oil)
1 Residence
2 Industrial
3 Street
4 Head-lighting
5 Flood-lighting
6 Picture Projection
7 Shades, Reflectors, Fixtures
8 Lamps (See *I*-5, *Z*-7)

I MACHINERY AND TOOLS
1 Machine Parts
a Ball and Roller Bearings
b Gears
c
2 Machine Tools (Specify what tools)
a
b
c
d Grinding Machines
e Polishing Machinery
3 Small Tools
4 Gages, Jigs and Fixtures
5 Metal-working Machinery
a Bending and Straightening Machines
b Shearing Machines
c Power Presses
d Wire-drawing Machines
e

I MACHINERY AND TOOLS (*Continued*)
6 Forge Shop Equipment (See also *N*)
a Steam and Air Hammers
b Bulldozers
c
7 Welding Equipment
✓ *a* Electric
✓ *b* Oxy-acetylene
c

J ENGINEERING MACHINERY
1 Air Machinery
a Compressors
b Pneumatic Tools
c Fans and Blowers
d Turbo-blowers
e
2 Pumps
a Centrifugal
b Direct-acting
c Hydraulic-pressure
d Pumping Engines
e
3 Refrigerating
a Ice Making
b Cold Storage
c
4 Hoisting and Conveying
a Conveyors
b Cableways
c Cranes and Hoists
d Elevators and Escalators
e Pneumatic Tube Systems
f
5 Mining
a Boring
b Draining
c Dredging
d Excavating
e Hydraulic
f Quarrying
g Tunnelling
h
6 Chemical Plant Equipment
a Evaporators
b Drying Apparatus
c
7 Fire Extinguishing Machines
a Sprinklers
b Engines
c Chemical
d

K INDUSTRIAL MACHINERY
1 Cement
2 Dairying
3 Flour-milling
4 Mining and Ore-dressing
5 Paper and Pulp
6 Logging
7 Saw-mill
8 Shoe
9 Sugar
10 Textile
11 Wood-working
12
13
14 Specialty Machines
a Adding
b Envelope
c Sewing
d Typewriters
e Weighing
f

L MATERIALS
1 Iron and Steel
a Cast Iron
b Malleable Iron
c Wrought Iron
d
e Alloys
f Cast Steel
g High-speed Steel
h Steel Castings
j Structural Steel
k Manfactured Product (See *L*-5)
l Cold-drawn Steel
m
2 Non-ferrous Metals
a Alloys
b Aluminum and Magnesium
c Antimony, Bismuth, and Cadmium
d Brass and Bronze
e Chromium and Manganese
f Copper
g Gold and Silver
h Iron and Steel
i Lead
j Mercury
k Nickel and Cobalt
l Platinum Metals
m Radium and Uranium
n Silicon and Titanium
o Sodium
p Tin
q Tungsten
r Zinc
s

B2 | A7 Consulting Engr.
B23 | A7 Research Elec. Furnaces
B5 | A7 Design Elec. Eqpt.
B29 | A7 Testing Engr.
I 7b, N4, 26

INDEXING SCHEDULE
(Continued)

L MATERIALS (*Continued*)
- 3 Non-Metals
  - *a* Abrasives
  - *b* Asbestos
  - *c* Belting Materials
  - *d* Insulating Materials
  - *e* Lubricating Oils
  - *f* Carbon Products
  - *g* Concrete, Reinforced Concrete
  - *h* Timber
  - *i*
- 4 Chemicals
  - *a* Acids, Alkalies and Salts
  - *b* Alcohol and Acetone
  - *c* Ammonia
  - *d* Analytical Chemistry
  - *e* Barium Compounds
  - *f* Cement, Lime (see **L**-3)
  - *g* Coke and Tar
  - *h* Dyes and Textiles
  - *i* Explosives (high)
  - *j* Explosives (black powder)
  - *k* Fats and Soaps
  - *l* Fertilizers
  - *m* Foods
  - *n* Glass and Ceramics
  - *o* Inorganic Chemicals
  - *p* Nitrogen (synthetic)
  - *q* Organic Chemicals (other than *b*)
  - *r* Paints and Varnish
  - *s* Petroleum and Asphalt
  - *t* Pharmaceuticals
  - *u* Pyrotechnics
  - *v* Rubber and Allied Substances
  - *w* Sugar, Starch, and Gums
  - *x* Toluol, Benzol
  - *y* Wood Products
- 5 Supplies
  - *a* Bolts and Nuts
  - *b* Brass Products
  - *c* Pipe and Fittings
  - *d* Tubes
  - *e* Wire
  - *f*

M MEASURING AND TESTING APPARATUS
- 1 Calipers and Gages
- 2 Pressure Gages
- 3 Flow Meters
- 4 Dynamometers
- 5 Electrical Instruments
- 6 Pyrometers
- 7 Recording Instruments
- 8 Testing Machines
- 9 Weighing Apparatus
- 10 Photometers
- 11

N METALLURGICAL EQUIPMENT
(For Heat-treatment, etc., see **Z**)
- 1 Foundry Equipment (Specify what equipment)
  - *a*

N METALLURGICAL EQUIPMENT (*Continued*)
- 2 Iron and Steel Works Equipment
  - *a* Blowing Engines
  - *b* Coke oven (including by-product) Equipment
  - *c* Rolling Mill Equipment
  - *d*
- 3 Forging Equipment
  - *a* Forging Presses
  - *b*
- 4 Electric Furnace

O MUNICIPAL AND COMMUNITY
- 1 Pavements and Roads
- 2 Sewerage and Water Supply
- 3 Irrigation

P MUNITIONS
- 1 Artillery
- 2 Machine Guns
- 3 Rifles
- 4 Side Arms
- 5 Explosives
- 6 Shells
- 7 Fuses
- 8 Cartridges
- 9 Aircraft Bombs
- 10 Torpedoes
- 11 Mines
- 12 Grenades
- 13

Q GAS MANUFACTURE AND SUPPLY
- 1 Coal Gas Plant
- 2 Water Gas Plant
- 3 Pintsch Gas Plant
- 4 Distribution System
- 5 Lamps (see **Ha**)
- 6

Qa OIL AND NATURAL GAS SUPPLY
- 1
- 2 Natural Gas Wells Equipment
- 3 Natural Gas Distribution
- 4 Oil Well Equipment
- 5 Oil Distribution
- 6 Oil Refining
- 7 Lamps (see **Ha**)
- 8

R POWER GENERATION
- 1 Steam Power and Plant Equipment (For Furnaces see **G**)
  - *a* Boilers
  - *b* Superheaters
  - *c* Economizers
  - *d* Feedwater Heaters
  - *e* Engines

R POWER GENERATION (*Continued*)
  - *f* Turbines
  - *g* Condensers
  - *h* Piping, Valves and Fittings
  - *j* Steam Specialties
  - *k*
- 2 Gas Power and Plant Equipment
  - *a* Gas Producers
  - *b* Blast Furnace and Coke-oven Gas Equipment
  - *c* Gas Engines
  - *d* Oil Engines
  - *e* Gasoline Engines
  - *f* High-speed Gasoline Engines
  - *g*
- 3 Hydraulic Power and Plant Equipment
  - *a* Turbines
  - *b*
- 4 Electric Light and Power
  - *a* Central Stations
  - *b* Isolated Plants
  - *c*
  - *d* Substations

S POWER TRANSMISSION
- 1 Electric
  - *a* Motor Drive
  - *b* Motor Control
  - *c*
- 2 Belt Transmission
  - *a* Shafting
  - *b* Pulleys
  - *c*
- 3 Rope Transmission
- 4 Chain Transmission
- 5 Gearing
  - *a* Reduction Gearing
  - *b*

T SHIPS
- 1 Merchant Ships and Transports (Specify wood or steel)
- 2 Warships
- 3 Patrol Boats
- 4 Small Boats, Yachts
- 5 Submarines
- 6 Trawlers and Mine Sweepers
- 7

U STRUCTURES AND BUILDINGS
- 1 Foundations
- 2 Factories
- 3 Tanks
- 4 Power Houses
- 5 Docks, Dikes, Levees
- 6 Bridges
- 7 Dams
- 8

U TRANSPORTATION
- 1 Animal
- 2 Automobiles (Specify whether gasoline, electric or steam)
  - *a* Pleasure Cars
  - *b* Road Tractors
  - *c* Trucks
  - *d* Motor Cycles
  - *e* Motors
  - *f* Accessories and Parts
  - *g*
- 3 Railway, Electric
  - *a* Maintenance of Way
  - *b* Valuation
  - *c* Trolley Cars
  - *d* Gasoline-electric Cars
  - *e* Car Barns and Sheds
  - *f* Electrolysis Prevention
  - *g*
- 4 Railroad, (Steam or Electric) (Specify whether steam or electric)
  - *a* Maintenance of Way
  - *b* Cars
  - *c* Locomotives
  - *d* Brakes
  - *e* Locomotive Terminals and Equipment
  - *f* Signals
  - *g*
- 5 Railway, Industrial
- 6 Marine
  - *a* Boilers
  - *b* Oil-burning Equipment
  - *c* Steam Engines
  - *d* Oil and Gasoline Engines
  - *e* Turbines
  - *f* Electric Drive
  - *g* Propellers
  - *h* Steering Gear
  - *j*
- 7 Canal
  - *a* Electric
  - *b*

W

X

Y

Z MANUFACTURING AND SPECIAL PROCESSES
- 1 Machine Shop Processes
- 2 Cement Manufacture
- 3 Paper Manufacture
- 4 Textile Manufacture
- 5 Electrochemical
- 6 Electrometallurgical
- 7 Special Processes (Please add any processes with which you have had experience).
  - *a* Dynamic Balancing
  - *b* Die Casting
  - *c* Heat Treatment
  - *d* Metal Coating
  - *e* Wood Preservation
  - *f* Lamp Manufacture
  - *g*