Across

7 Any of the small solid extraterrestrial bodies that hits the earth's atmosphere (6)

8 Italian engineer now largely regarded as the inventor of the telephone (6)

9 City in northwestern Switzerland (as the French spell it!) (4)

10 Physicist born in Germany who formulated the special theory of relativity (8)

11 Festival of the heathen Celts on the first day of May, in the observance of which great bonfires were kindled. It still exists in a modified form in some parts of Scotland and Ireland (7)

13 Having a grey or brown streak or a pattern or a patchy colouring; used especially of the patterned fur of cats (5)

15 French composer best known for his operas (1838-1875) (5)

16 Skilled weaver who challenged Athene to a contest, when she tried to hang herself, Athene changed her to a spider (7)

18 Irish playwright remembered for his satirical comedies of manners (1751-1816) (8)

19 (maths) hyperbolic sine (4)

Down

1 Queen of the Olympian gods in ancient Greek mythology; sister and wife of Zeus (4)

2 Czar of Russia who introduced ideas from western Europe to reform the government (5,3,5)

3 City on the Loire river in north central France; site of a siege by the English (7)

4 Relating to a sultanate in the Arabian Gulf or to its inhabitants (5)

5 Oscar winning US film actor who starred in *From Here to Eternity* (4,9)

6 Russian composer of orchestral and piano music (1872-1915) (8)

12 Twelve days after Christmas; celebrates the visit of the three wise men to the infant Jesus (8)

14 South American river 1,500 miles long; flows into the South Atlantic (7)

17 Younger brother of Edwy who became king of Northumbria when it renounced Edwy; on Edwy's death he succeeded to the throne of England (944-975) (5)

20 City in southeastern France on the Mediterranean; the leading resort on the French Riviera (4)

21 Capital of Turkey; located in west-central Turkey; it was formerly known as Angora and is the home of Angora goats (6)

22 City in the Andes, known as the marble city (6)