



DRAWING SUPPLIED TO IOWA GEO MUSEUM COURTESY OF IOWA STATE UNIVERSITY

1908: A man with a bad reputation as a poacher was under investigation for the murder of Margaethe Filbert in Bavaria, Germany. Investigating mud on the suspect's shoes, Georg Popp, a chemist and geologist in Frankfort, used geology to help solve the case.

The suspect's wife testified that she had dutifully cleaned her husband's shoes the day before the crime. Those shoes had three layers of soil adhering to the leather in front of the heel. Popp reasoned that the innermost layer was the oldest. It contained goose droppings and other earth materials, matching samples from the walk outside the suspect's home. The second layer contained red sandstone fragments and other particles that compared with samples taken where Filbert's body had been found. The last layer and thus, Popp said, the youngest, contained brick, coal dust, cement and a series of other materials that matched samples taken outside a castle where the suspect's gun and clothing had been found.

Devil in the Details

THE SCIENCE OF
FORENSIC GEOLOGY

Raymond Murray

*"Holmes—his limits—
Knowledge of Geology—
Practical, but limited.
Tells at a glance different
soils from each other.
After walks has shown
me splashes upon his
trousers, and told
me by their colour and
consistence in what part
of London he had
received them."*

—ARTHUR CONAN DOYLE,
A Study in Scarlet