

REMARKABLE EXPLOSION OF A LOCOMOTIVE.

To the Editor of the Scientific American:

Thinking the readers of the SCIENTIFIC AMERICAN might be interested in a rather remarkable boiler explosion which happened to locomotive No. 52 on the C., W. & B. R.R., on the morning of the 24th of December, 1888, I inclose you a photograph of the engine, which I took the day after the explosion.

No. 52 is one of the old Rogers engines, and had been in use for about twenty-four years. At the time of the

The two men in the picture are the engineer and fireman.

Hoping these facts may interest you, I remain, as ever, an interested reader of your valuable paper, which I have taken for several years. CHAS. P. GILMORE. Chillicothe, O.

A CONTINENTAL VILLA.

We reproduce, from an early number of our ARCHITECTS AND BUILDERS EDITION OF THE SCIENTIFIC

The kitchen and store rooms are in the basement, and on the first floor are the living and drawing rooms, dining room, etc. The upper story contains only sleeping rooms. The owner gave directions for the arrangements of the plans, according to which seven rooms of the first floor were to be connected, in consequence of which the entrance and the vestibule had to be included in one room. The interior is finished in stucco, and the dining room, billiard room, and library are provided with wooden panels and wooden ceilings. The ceil-



EXPLODED LOCOMOTIVE No. 52, CIN., W. & BALT. R.R.—[FROM A PHOTOGRAPH BY CHAS. P. GILMORE.]

explosion, which happened about one mile west of Blanchester, Ohio, she was pulling a passenger train at a speed of over thirty miles an hour, and, strange to say, she did not leave the track, although the explosion tore the barrel of the boiler completely off from the smoke arch to the wagon top. It started on the left side and tore over the top to the right, the sheet there blocking the driving wheels so they could not turn, and destroying the air brakes, so that the engineer, Ed. Rother, and fireman, Oscar Hodson (neither of whom was hurt in the least, although both were covered with soot and dirt), had to climb back over the tank and brake the train by hand. The explosion was heard for five miles, and the shock was so great that it jarred the lids off the stove in a house near the track where it happened. A piece of the bell was found over a quarter of a mile from where the explosion happened.

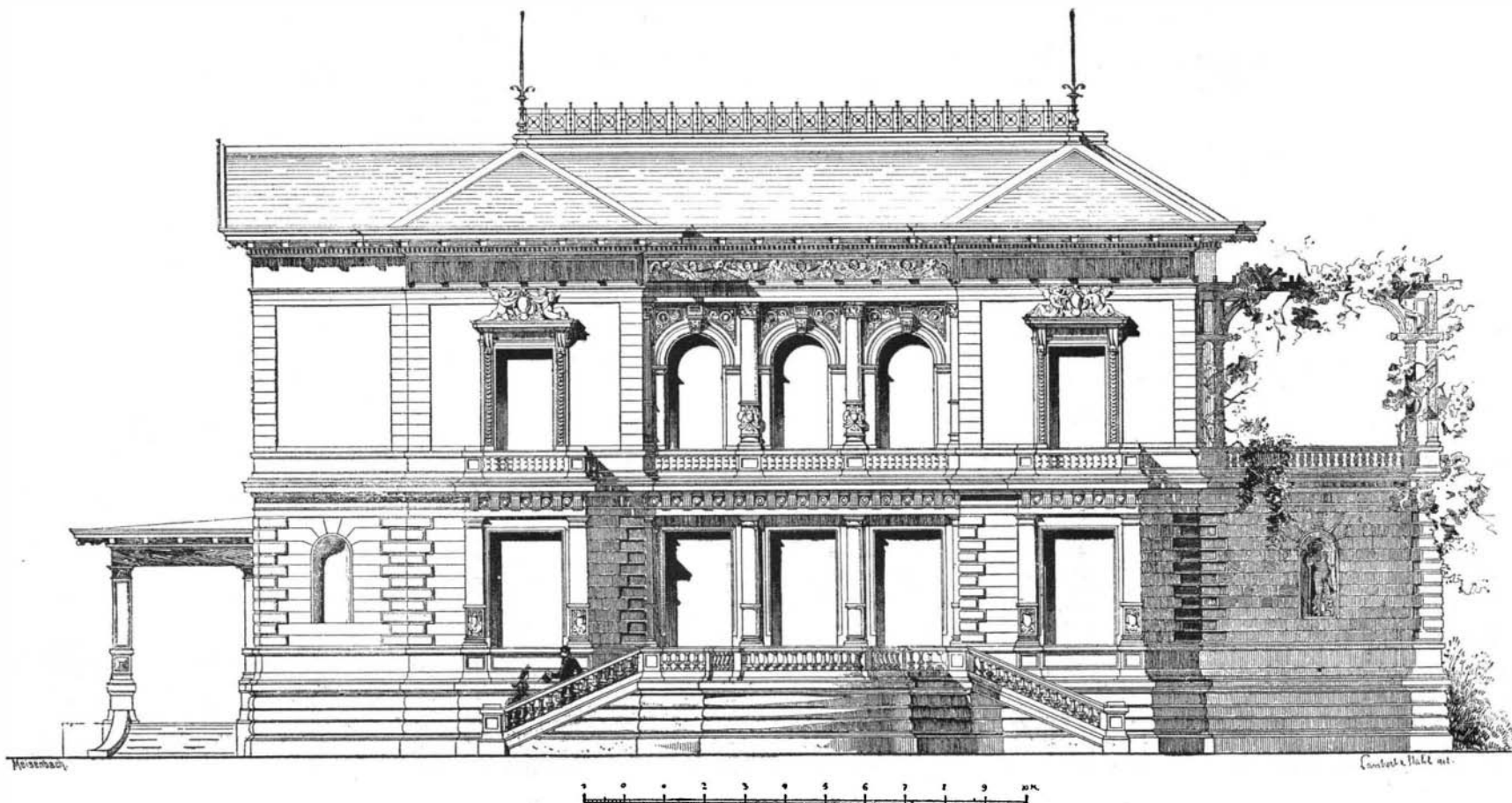
AMERICAN, the illustration of a simple and unique design of a dwelling house or villa in the classical style of architecture. The design is very simple, and unlike most of the country houses which have been built in this country; and we would suggest that, for large towns or small cities, a house of this description would be well adapted and strikingly ornamental. It would certainly attract attention from its unusual appearance, and an architect could enlarge the house and arrange the interior to suit the taste and convenience of a large or a small family, preserving the architectural design, which is unusually attractive.

The *Architektonische Rundschau*, in which publication the engraving first appeared, stated that Puttfarcken and Janda, of Hamburg, were the architects, and that the villa was erected at Wandsbeck, Germany, in 1886.

ings of the other rooms are plastered and richly frescoed. All the furniture and decorations were made from plans drawn by the architects. The cost of the building was about \$40,000, and of the furniture about \$20,000.

Magnetic Purification of Clay.

Electricity is being more and more used for the purification of kaolin and other porcelain clays. The clay is sifted on to a rapidly revolving horizontal plate, which is surrounded with powerful electro-magnets, which retain the particles of iron. From this the clay passes to a second plate which removes the last traces. The process is said to be comparatively cheap and very rapid, and since its introduction many clays hitherto rejected as containing too much iron have become of value for the manufacture of pottery.



A CONTINENTAL VILLA—PUTTFARCKEN & JANDA, ARCHITECTS.