

The story
of the
Berkeley Fire



Affidavits

January 21, 1924.

STATE OF CALIFORNIA }
County of Alameda } ss.

Arthur G. Brodeur, being duly sworn, deposes and says that his home at 125 Shasta Road, Berkeley, was the first house to be destroyed in the Berkeley conflagration of September 17, 1923; and that his home caught on side walls from burning grass and adjacent pine trees, and that the shingled roof caught from the side-walls and was last to burn.

(Signed) ARTHUR G. BRODEUR.

Subscribed and sworn to before me this
21st day of January, 1924.

HORACE A. JOHNSON,
Notary Public in and for the County
of Alameda, Sate of California.

(Notary Seal)

January 21, 1924.

STATE OF CALIFORNIA }
County of Alameda } ss.

(Mrs.) Ethel M. Underhill, being duly sworn, deposes and says:

That her house at 1350 Tamalpais Road, Berkeley, was the second house to be destroyed in the Berkeley conflagration of September 17, 1923; and that her house caught on the side walls from burning grass and adjacent brush and that the shingle roof caught from the side walls and was last to burn.

(Signed) (MRS.) ETHEL M. UNDERHILL,

Subscribed and sworn to before me this
21st day of January, 1924.

HORACE A. JOHNSON,
Notary Public in and for the County
of Alameda, Sate of California.

(Seal of Notary)

The Story of the
BERKELEY FIRE
Of September 17, 1923

This booklet is issued in the interest of truth and fair play. An attempt has been made by interested parties to draw from the Berkeley conflagration, conclusions unfavorable to the use of shingles in building construction.

These interests have, in fact, broadcasted unqualified assertions to the effect that the spread of the fire was attributable directly if not solely to the use of shingles.

The testimony of the camera, as presented on the following pages, is proof irrefutable of the falseness of such claims.

Confirming the photographic evidence which follows, the reader is asked to consider the appended facts:

The wind velocity was approximately 40 miles per hour, not 25 miles, as has been stated. The apparatus used by the Department of Geography of the University of California, in recording wind velocity at the University campus, was

broken when a velocity of 25 miles was attained. By taking certain known factors, however, such as the total amount of wind for the day, the Department of Geography was able to extend the broken curve and approximate the actual velocity at 40 miles per hour.

Any attempt to make capital of the fact that a large percentage of the structures destroyed were of shingled-roof construction or to prove the susceptibility of such structures by means of pictures showing shingled roofs in flames is the rankest sophistry, since a sweeping conflagration, where even buildings of brick with roofs of slate are totally destroyed, the type of structure to suffer in greatest numbers will be, of course, the type predominating in the burned area. The fact that over 90% of the buildings destroyed in this fire were of shingled construction, indicates simply the predominance of such structures and the

great popularity of shingles with American home owners.

Many of the persons of prominence who suffered the loss of their homes in the Berkeley fire, including principals and professors in the local school and in the University of California, have testified that shingles were not the cause of the Berkeley fire, that they had lived all their lives under shingled roofs and would continue to do so.

The attention of the reader is called to the map on the last page of this booklet. A brief study of this will show conclusively that the heavy loss in this fire is chargeable to the inadequacy of the size of the water mains and the lack of water in these mains. Note the following facts:

- (1) Within the burned area nearly all mains were only 2 inches in diameter.
- (2) That of the two **used** mains over 4 inches in diameter, located in the burned area, one had no water and one is marked "Vacuum."
- (3) That with one exception the whole eastern side of the fire was stopped along the exact line of a large and presumably adequate 16-inch main.

- (4) That the fire stopped on the south and west at or about the time the wind changed and also at or near 10-inch mains.

Summed up, the Berkeley fire was due to a combination of circumstances, principal of which were the following:

Lack of fire-breaks in the hills. In previous years, approximately \$2000 had been spent annually for the burning of such breaks, but as a measure of economy the City Council had failed to provide this protection.

Lack of water, due to weakness of the water distribution system.

Over-crowding of the building spaces. The burned district was closely built with two dwellings to a lot in numerous instances.

Inadequacy of fire apparatus—only four pumpers in a city of 56,000—and shortage of hose.

Failure to secure outside aid promptly. Fire had raged for about two hours before the arrival of apparatus from the nearby cities.

High wind, averaging around 40 miles per hour. Low humidity—about 25% as against a normal 65%.



**Site of home of Professor
Arthur G. Brodeur,**
125 Shasta Road.

Arrow at top center, home
of Mrs. Ethel M. Underhill,
1350 Tamalpais Road.

Looking Southwest—First (“Key”) house to catch fire—an all-shingle home. Owner absent. Side walls caught from burning pine trees around house. (See affidavit.) Second house to catch fire can be seen in center across draw. Owner states that fire (fanned by 40-mile gale) roared up through brush and set fire to side walls (see affidavit)—that house did not catch from roof nor from burning shingles from first home, as claimed. If shingles blew from “Key” house, why did all shingle roofs in draw escape undamaged? They were directly in path of flames, but clearing saved them from brush fire.



Home of Professor Tolson,
University of California,
on Shasta Road (at top right).

Looking Northeast—An all-shingle home directly in the path of the strong wind and adjoining first house to catch fire. This house was not surrounded by trees and suffered no damage to the roof. The side wall was partially scorched, as indicated by small amount of repair shown.



Ruins of home of Mr. Ralph Merritt,
Comptroller, University of California.

This picture tells a graphic story of what happens to a brick house, with a slate roof, in the path of a conflagration like the Berkeley fire. It is a significant fact that of all the houses saved in this memorable fire many had shingle roofs and not a few were all-shingle houses.



Brush and grass fires swept over hill in background. The arrow at the center, near top, points to location of first house to catch fire. (See illustration and affidavit.)



PANORAMIC VIEW OF THE BERKELEY FIRE



PANORAMIC VIEW OF THE BERKELEY FIRE



The large amount of shrubbery and shade trees, as shown, contributed largely to the spread of the fire, coupled with the high wind, low humidity and the total inadequacy of the water mains.



Brush and grass fires swept over hill in background. The arrow at the center, near top, points to location of first house to catch fire. (See illustration and affidavit.)

← Simulated gatefold edge



**What a wonderful story
this picture tells!**

These fraternity houses were saved by reason of the efforts of the boys who lived in them. The fire fighting force won out despite lack of water. Everything surrounding was completely destroyed and they were to have been dynamited, but the boys refused to leave the roofs.



Scene on Heart [*sic*]
Avenue near Scenic Avenue

This photograph shows two stucco houses and one all-shingle house. All these houses had shingle roofs. These houses, which were right in the path of the flames, were saved by a sudden change in the wind. The shingle roofs were not even scorched, despite the rain of sparks that must have fallen on them before the course of the wind changed.



Le Conte and Le Roy Avenues

This house was on the edge of the fire and was separated from the adjoining house by only a fifteen-foot alley. The neighboring house was almost completely destroyed, while this all-shingle structure, though badly scorched, was not destroyed.

**Greenwood Terrace,
near Buena Vista Way,
looking west.**

An all-shingle house that was completely surrounded by fire, but was saved because it was somewhat isolated. When its location is considered and how it must have been fairly showered by sparks, shingles certainly did not prove such a fire hazard.





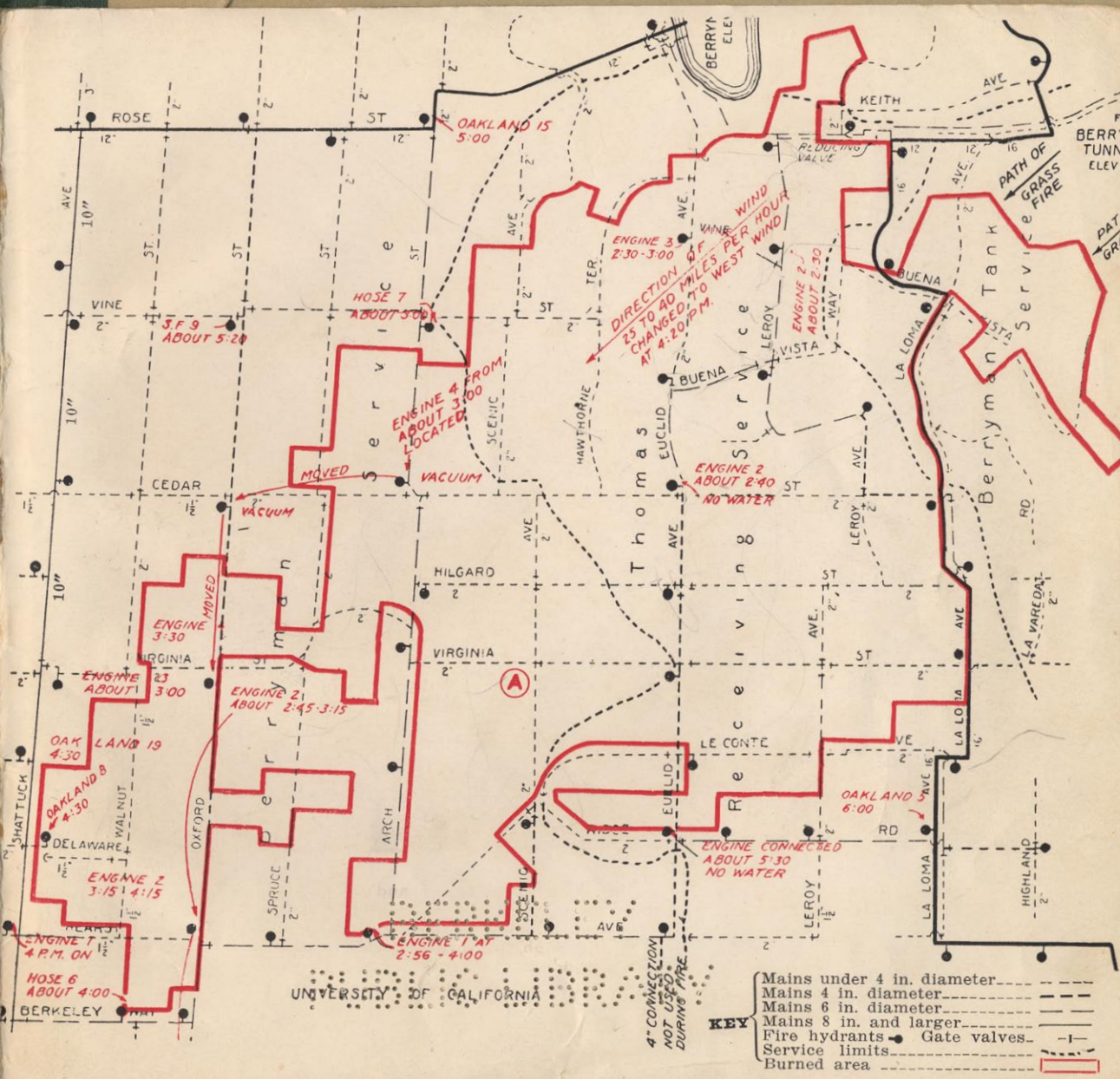
Looking southwest over the ruins of Professor Maybeck' home on Buena Vista Way.

Another example of a shingle roof house completely surrounded by fire. Note particularly the fir tree shown at the corner of roof. This tree caught fire and was chopped down while burning. Shingles were charred by burning branches and needles, but the house was saved. All surrounding shrubbery was killed by the heat of the fire.



**Greenwood Terrace,
near Buena Vista Way,
looking east.**

The arrow indicates a stucco and concrete house that was completely destroyed. The wind blew directly across the shingle roof home that was saved, but it remains as good as it ever was. Fire ran through the shrubbery, the garden was ruined, and the ivy on the side of the house was killed by the heat. Despite this fiery ordeal, it escaped intact.



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KEY

- Mains under 4 in. diameter
- Mains 4 in. diameter
- Mains 6 in. diameter
- Mains 8 in. and larger
- Fire hydrants
- Service limits
- Burned area

4" CONNECTION NOT USED DURING FIRE

S.F. 9 ABOUT 5:20

HOSE 7 ABOUT 3:00

ENGINE 4 FROM ABOUT 3:00 LOCATED

WIND DIRECTION 25 TO 40 MILES PER HOUR CHANGED TO WEST WIND AT 4:20 P.M.

ENGINE 2 J ABOUT 2:30

ENGINE 2 ABOUT 2:40 NO WATER

ENGINE 3:30

ENGINE ABOUT 3:00

ENGINE 21 ABOUT 2:45-3:15

OAKLAND 19 4:30

OAKLAND 8 4:30

ENGINE 2 3:15 4:15

ENGINE 1 4 P.M. ON

HOSE 6 ABOUT 4:00

ENGINE 1 AT 2:56 - 4:00

ENGINE CONNECTED ABOUT 5:30 NO WATER

OAKLAND 3 6:00

1875

1875