Harry T Burn was born in Mouse Creek, TN. His father was the local stationmaster and a community businessman and his mother was a teacher. Harry was the oldest of four children.

His political career began very early, he was elected to the State Legislature at age 22 in 1917, making him the youngest member, as a representative from McMinn County. He was still in office during the proposal of the 19th amendment regarding women's suffrage. In order to be passed, this amendment needed to be passed my a minimum of 36 states out of the 48. In 1920, 35 states had ratified the amendment so five more states were called to vote. The session was set to meet in August of 1920.

Burn had originally intended to vote in favor of women's suffrage, but after hearing that his constituents opposed it, he was going to vote against. A letter from his mother made him reconsider. The letter said:

Dear Son:

...  

Hurrah and vote for Suffrage and don't keep them in doubt. I noticed Chandlers' speech, it was very bitter. I've been watching to see how you stood but have not seen anything yet ... Don't forget to be a good boy and help Mrs. Thomas Catt' with her "Rats." Is she the one that put rat in ratification, Ha! No more from mama this time.

...
With lots of love, Mama.

The vote was 48-48 and his vote broke the tie. The amendment was ratified.

Burn served in office for most of his adult life, being a State Representative (1918-1922), a State Senator (1948-1952), on the State Planning Commission (1952-1970), and a member of the Tennessee Constitutional Convention (1953, 1959, 1965, and 1971). He was admitted to the Tennessee Bar in 1923 and practiced law in Sweetwater, TN.

Burn was married twice in his life and had one child. He married Mildred Rebecca Turnwater from 1933 to 1935. He then married Ellen Folsom Cottrell in 1937 and they had one child, Harry T. Burn Jr.