Rage against the machines
Labor-saving technology and unrest in England, 1830-32
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Research Question
When do new technologies cause social unrest?

1. Labor market effects of new technologies.
2. Economic determinants of civil conflict.

1800 England
In 1800, *threshing* is the most important winter task for rural workers.

In 1786, new labor-saving technology arrives: the *threshing machine*.

The 1830 “Swing” riots
1830-1832: largest rural revolt in the history of England. 3000+ episodes across 45 counties.

Machines & riots
New database on threshing machine diffusion from newspapers’ ads.

Riots and machines very correlated.

Is it causal? Identification strategy
1. Most productive machines operated by *water* \(\Rightarrow\) accumulation flow
2. Threshing machines useful to thresh *wheat* \(\Rightarrow\) wheat suitability

Mechanisms
New technology created «technological unemployment».

Consequences of the riots
Lower adoption of labor saving technology in 1832-1853 where rioters attacked threshing machines.

Opposite effect for non-labor saving machines (seed drills & chaffers).