AFD 306 Links and Notes - Part 2: The Rise of Standard Oil

- Before reaching the retail market, the early US oil industry had 3 key elements in its supply chain: The producers at the wellhead, the refineries converting crude to refined oil, and the transportation sector (rail, pipelines, rafts, wagons) moving both the crude and refined oil from place to place. Last week we talked about the discovery of oil in northwestern Pennsylvania, the early efforts to transport it, and the extreme volatility in the market as new production came online faster than could be refined or consumed.
- Last episode, we discussed how difficult it was to move crude oil out of the Pennsylvania oil regions, but it was also critical to move refined oil from the refineries all over the broader Ohio/Western Pennsylvania region to the major American cities and the foreign export docks, which was done by rail on three railroads – the Erie, the Central, and the Pennsylvania. (There was also long-distance crude shipping to refineries in Philadelphia and New York or to foreign export crude terminals.)
- This week, we won't be going into a great deal of depth on the railroads as an industry, because that's coming up in our mini-series on the early US oil industry and deserves its own episode. But the railroad industry was the backdrop for the schemes and conspiracies we will be covering today. The important part to know for this week is that at the time of these conspiracies in the 1870s, US railroads were legally considered "common carriers" meaning that they had to charge the same rates to every customer regardless of volume or established relationships, under common law. (The Interstate Commerce Commission didn't exist until quite a bit later, in 1887.) They established a system of rebates on the published rates to give to preferred customers or high-volume customers – and Rockefeller tried to unify that rebate system.
- Rockefeller's (failed) initial scheme for refined oil shipping rebates:
    - The "blank check" charter of the South Improvement Company in Pennsylvania (etc), which highlights the role of state governments at the time as opposed to federal governments
      The South Improvement Company can own, contract, or operate any work, business, or traffic (save only banking); may hold and transfer any kind of property, real or personal; hold and operate on any leased property (oil territory, for instance); make any kind of contract; deal in stock, securities, and funds; loan its credit, guarantee any one's paper; manipulate any industry; may seize upon the lands of other parties for railroading or any other purpose; may absorb the improvements, property or franchises of any other company, ad infinitum; may fix the fares, tolls, or freights to be charged on lines of transit operated by it, or on any business it gives to any other company or line, without limit.
      Its capital stock can be expanded or "watered" at liberty; it can change its name and location at pleasure; can go anywhere and do almost anything. It is not a Pennsylvania corporation only; it can, so far as these enactments are valid, or are confirmed by other Legislatures, operate in any state or territory; its directors must be only citizens of the United States not necessarily of Pennsylvania. It is responsible to no one; its stockholders are only liable to the amount of their stock in it; its directors, when wielding all the princely powers of the corporation, are also responsible only to the amount of their stock in it; it may control the business of the continent and hold and transfer millions of property, and yet be rotten to the core. It is responsible to no one; makes no reports of its acts or financial condition; its records and deliberations are secret; its capital illimitable; its object unknown. It can be here to-day, to-morrow away. Its domain is the whole country;

its business everything. Now it is petroleum it grasps and monopolises; next year it may be iron, coal, cotton, or breadstuff's. They are landsmen granted perpetual letters of marque to prey upon all commerce everywhere.

- Rockfeller's (successful) scheme against competing refineries in Cleveland
- https://archive.org/details/historyofstandar00tarbuoft/page/vii/mode/1up
    - Pp. 38-69 (digital pages): Rise of Standard Oil [as short-lived South Improvement Company scheme of late 1871 to April 1872]
        - Standard Oil was expanding suspiciously quickly. Other companies suspected reduced transportation costs. Erie was giving rebates to companies based on volume. Standard, as one of the largest companies, was able to negotiate rebates that no other company could. At the end of the month, oil companies would send vouchers for oil shipped for 40 cents/ barrel and would get 15 cents/barrel back. Only applied to oil shipped from wells, didn't apply to oil shipped eastward.
        - Lake Shore and Michigan Southern and New York Central railroads were also interested in Cleveland refineries, because they were in competition with Oil Region Pennsylvania Transportation/Empire Transportation, who were investing in a refinery in Jersey City, so they were very generous with granting rebates and refiners weren't shy about asking for them [52]
        - Cleveland area was over-saturated with refiners, which pushed the cost of refined oil down. Rockefeller wanted to control refining in the region, so began scheme to buy small refineries by strong-arming them.
        - Standard Oil also wanted to force Europe to buy refined oil by forcing railroads to stop transporting crude destined for export.
    - Pp. 70-103 (digital pages): The Oil War [how the producers pushed back]
        - Oil producers at the time were a mix of minor producers (even just 10 barrels or fewer per day) and major producers backed by big capital from the East, but major producers were still less prevalent
        - The oil region itself was also home to many refineries, although a majority of US refineries were located in bigger cities farther away
        - A surprisingly early investigation by the government, due to oil producers uniting to demand that congress investigate
        - Petroleum Producers' Union (formed on Feb 27, 1872 in Titusville, Penn.) also agreed to stop production for 30 days and created a black list of known associates of the SIC. Also pledged to support independent creek refiners, and to build and control their rail lines.
        - Oil City Derrick newspaper was important in spreading information about SIC's business doings. They helped drum up public sympathy for the producers
        - Contracts with railroads raised transportation costs by 100 percent, but it went to SIC. They got a reduced rate but also got a $1/barrel of all competitors as well.
- https://en.wikipedia.org/wiki/South_Improvement_Company
    - Crude oil suppliers formed their own organization called the Petroleum Producers' Union which levied a boycott on all members of the South Improvement Company on March 1, 1872. The producers' union also agreed to stop drilling wells for 30 days. On March 2, 1872, the Pennsylvania Railroad sent a message to the oil regions indicating that their lines would not harm the

mutually beneficial relationship between the railroads and the producers. By March 9th, newspapers were generally attacking the South Improvement Company as an assault on free enterprise. On March 11, 1872, New York refiners sent a delegation to the oil regions to back the suppliers' opposition to the South Improvement Company. On March 23, John D. Rockefeller met with producers, refiners, and railroad leaders. On March 25, 1872, railroad leaders ended their contracts with the Southern Improvement Company and publicly announced that thereafter no rebates would be made or allowed. The state of Pennsylvania suspended its charter on April 2, 1872.[2] On April 10, the suppliers' oil embargo was officially lifted.[8] Two weeks after the railroad contracts with the South Improvement Company were ended, the Pennsylvania Railroad gave rebates to refiners on its lines.

- Pp. 104-128 (digital pages): The Unholy Alliance [Rockefeller's proposal for a non-covert cartel to keep the price of *refined* oil stable (& high) under one company for the entire country with payouts for those who had to shut down production intermittently to stabilize prices]
    - For all the crying about monopolies, the producers managed pretty quickly to create a cartel of their own to halt production almost completely in the entire region until surplus oil stockpiles had gone down so that the sale price to refiners or crude exporters would go back up. They also expressed some interest in potentially lobbying foreign governments to put tariffs on refined oil imports but not crude oil imports so that foreign market demand would be for crude, not refined oil.
        - One interesting aside: The producer cartel, created as a corporation to set & study production standards but not to directly own the oil production, was proposed to have a paternalist liberal mandate toward oilfield workers in addition to well owners: "Advise every employee to take at least one share of stock for himself and one for his wife and each of his children, and encourage him to pay for it out of his saved earnings or out of his monthly pay. If he is not able to keep up on his instalments, assure him that you will help him, and then take care to do it. You will thus do him a double kindness, and benefit his family by encouraging habits of thrift and economy. You owe this much to him who so nobly seconded your efforts to gain control of the market by stopping work. You had all to gain, and he had nothing to hope for but your benefit. Now show your appreciation of his acts by this evidence of your regard for his welfare"
    - Rockefeller's next move in Nov 1872 was to propose Standard Oil to pay an above-market fixed price ($4.75/bbl vs $3.47 ½ /bbl market price in Aug 1872 or $2/bbl in Jan 1873) for crude oil from the producer cartel so that the producers who hated him would be forced to sell to his refinery cartel because they couldn't pass up the extra money and they wanted to unload the glut of surplus oil in tanks, thereby cementing his pre-eminent position. Moreover, he threatened to buy oil from the non-cartel producers who were violating the production shutdown, if he was not able to buy crude from the producer cartel. The producers were afraid that once Rockefeller had pushed out or acquired all his competition in the refinery

business, he would drop back down to market price purchases of crude oil, but there was not much choice. Despite many objections from the leadership of the producer cartel, an agreement was signed for exclusive purchase from the cartel by Standard Oil (or the "Refiners Association") of 15k barrels per day at a generous above-market rate, with a signing bonus of a huge up-front acquisition of 200k barrels of surplus oil to help clear the stockpiles (albeit for not the same price as the promised daily rate). The agreement also disallowed any use of railroad rebates by Standard Oil. Rockefeller was secretly violating this provision already. He also terminated the agreement relatively quickly, citing insufficient restriction of production lowering the price too far below what he was willing to pay above-market. (He also didn't even have to complete the purchase of the signing bonus purchase because the cartel was too slow to transfer it to him, due to infighting over whose stockpiles would be tapped first.) This completely shattered the producer cartel as well as the attempted stoppage of pumping, and production ramped up massively on the basis that at least producers could make money off volume if not the price per barrel.

    - However, by June 1873, about 6 months later, the refinery cartel itself imploded as Rockefeller was unable to keep association refineries in line with his production caps and price floors and the refined oil sector was coming under pressure on the global market from new oil production coming online in foreign countries.
    - Rockefeller himself continued his successfully refinery business with vast profits and kept his partners in the rail industry happy with high volumes of shipped refined oil.
        - He cut back the shareholder dividends and began pouring money into supply chain acquisitions (barrel factories, refining ingredient production, directly-owned tank cars, terminal facilities in New York) and capital improvements to his refining facilities
- Pp. 129-166 (digital pages): "The Foundations of a Trust"
    - Why rebates for Standard Oil specifically (though everyone was getting some kind of rebate): Rockefeller could promise railroads huge guaranteed volumes of refined oil each day because of the size of his operations in Cleveland. The railroads liked the stability of one large customer, as well as the advantages of being able to run a non-mixed train of just oil (60 tank cars for example) from Cleveland to New York City. A round trip of a mixed train might take 30 days in this era, whereas a Standard Oil train could be shipped point to point and back empty in 10 days. It was also cheaper because of Standard Oil's standardization of their equipment & requirements. But they were also compelled to offer him rebates once one of their competitor railroads had done so because he did have multiple options for shipping his refined oil from Cleveland to the Eastern Seaboard.
    - The Erie Railroad was also desperate to build up its share of the refined oil shipping business at the expense of regional competing railroads and its corporate leaders had close pre-existing personal relationships to the leadership of Standard Oil, so they negotiated not only a set of

competitive price rebates to obtain 50% of Standard's shipments but also met a series of detailed demands by Standard Oil to ship directly from Standard refineries in Cleveland to Erie oil terminals in New Jersey which Standard leased and operated, thereby monitoring and servicing all of Standard's competitors among refinery customers on the Erie Railroad.

- [p.136] Standard Oil's huge business with Erie and Central risked a rate war between those two and the Pennsylvania Railroad, which carried most refined oil that wasn't shipped from Standard refineries, in part because of its access to the Pittsburgh refineries, instead of the Cleveland refineries. However in 1874, the Pennsylvania's ally in the Empire Transportation Company (mentioned last episode as a short-distance crude oil pipeline and long-distance crude oil rail shipping middleman) began negotiating a complex agreement between the three railroads to divide up the entire region's oil shipments between them, with input from Rockefeller. Empire, working in collusion with its competitors in the pipeline industry, was particularly interested in finding a rail pricing accord setup that would incentivize crude oil shipments out of the oil region in northwestern Pennsylvania (their whole business was to move it out of there) rather than encouraging the nascent localized refining industry from taking root. This was achieved by agreeing to price crude and refined oil shipments (by rail and pipeline) in terms of quantities and not in terms of distance, and to make crude shipments cheaper than refined shipments for equal volumes, but also to offer a "drawback rebate" that canceled the payment to ship unrefined oil to midwest refineries in exchange for shipping the refined product longer distances to final destination points. The railroads had some reason to do this too because the crude oil would need to be transported by rail from the production region to refinery hubs in Cleveland, Pittsburgh, New York City, or Philadelphia, which gave them additional business. But more importantly, they were willing to offer a system of "drawback" discounts to refineries in the west (Cleveland and Pittsburgh) to avoid losing all that shipping traffic from the West to seaboard refineries. The railroads were also easily able to justify a pricing formula that effectively disadvantaged localized refineries by claiming that they were merely being fair by charging equal rates to ship refined oil regardless of the location of the refineries. The refining hub cities had the advantages over northwestern Pennsylvania of already being established manufacturing cities and being cheaper to bring in refining inputs and equipment. (The railroads ignored requests to level the playing field by providing rebates to ship those items into the oilfield regions.)
- Rockefeller had no problem with (and helped Empire to negotiate) this new arrangement even though it might result in more crude oil being shipped directly to refineries in the Atlantic port cities or Pittsburgh because he was also in the process of persuading several friendly refinery owners not in Cleveland (who had been involved in the abortive South Improvement Company scheme) to transfer their refining operations in Pittsburgh and Philadelphia secretly to Standard Oil and become shareholders while continuing to operate under their own names

locally until such time as they in turn had bought out, leased, or bullied out all of the competition in those cities as Rockefeller had done in several years before in Cleveland. Simultaneously, Standard Oil secretly purchased a major refining company in New York City. By this means, Standard Oil secretly became the dominant refiner in the 4 major refining hub cities, including Cleveland, at the same time as the railroads were agreeing to create a de facto preference for shipping crude oil to any of these hubs instead of refining oil more expensively (but with shorter trips) in the oilfield regions, which could have become a 5th hub. As always, Standard Oil sought to become the standard-maker in the oil refining industry and set strict controls on all refineries now under its aegis.

- As the new refiner monopoly began to come to light (or at least the hint of it behind a new front organization posing as an industry advocacy group or a negotiating cartel), they simply defended themselves by arguing that they were bringing stability to the market and an end to non-productive financial speculation. They adopted the mantle of being a “movement” for a better industry. Production quotas were defended as trying to match supply more naturally toward demand to ensure “reasonable” profits. Increased prices in refined oil per gallon were defended as both being capped at a “reasonable” price by what foreign markets would bear as well as being necessary to cover all the production, refining, and shipping costs at the various points of the supply chain without bankrupting anyone.
- Rockefeller, now in nearly full control of the refining industry, now negotiated new rate rebates with the three big railroads serving the four major cities whose refining capacity he now dominated. He asked for relatively small rebates and they agreed initially. Then the three railroads met with each other to review how their own cartel negotiated by Empire Transportation Company was working and to make adjustments and they suddenly discovered that Rockefeller had been cheating them in their secret contracts with him because they didn’t know he had secretly acquired all the other refineries and thus couldn’t accurately assess the scope of his shipments to see whether they were getting the agreed guaranteed percentages of his volumes.
- Standard Oil’s secret subsidiaries operating “independently” were furiously hard at work buying up any competitor in their hub city who would sell (or sometimes leasing if a deal could be struck easily) and bullying anyone who wouldn’t sell, by artificially under-selling, creating backups in access to shipping cars, discouraging crude brokers from selling to the refiner, and any other tactic. In Pittsburgh specifically, the railroad companies and pipeline companies openly refused to help any independent refiners try to cut transportation costs from the oilfields that might have helped them remain competitive against Standard refiners. (This is alluded to in chapter 5 but elaborated in chapter 6.)
- From 1875 to 1878, Standard Oil’s secret but suspected subsidiary in the oilfield region itself, under the name Acme Oil Company, bought all but 2 local refineries under the crushing strength of the advantages of the rest of Standard’s empire outside of the oilfields. Everyone who sold out had

to sign a non-compete clause barring them from opening a new refining business for 10 years.

- Rockefeller also began acquiring or pushing out any independent and non-co-opted middlemen bulk crude shipper companies/individuals from the oilfields to independent refineries so that there would be even less leeway to cut costs and remain competitive against Standard. Plus he didn't like middlemen.
- Rockefeller continued during this period to acquire more and more parts of the oil industry supply chain, even forcing acquisitions of companies he had previously supplied refined oil to because he was no longer content to sell product to them if he could simply operate the business the customer had been operating.
- In 1876, an attempted lawsuit against the railroads for preferential treatment was quickly dropped after the litigants signed a secret contract with Standard Oil to obtain the same shipping rates on their behalf and to invest money into a brand-new refinery which they would operate as long as they met all the requirements and quotas requested by Standard. There was a guaranteed profit-sharing arrangement as well with Rockefeller. The secret contract was such a secret that Rockefeller said they could not even tell their wives and had to use secret post office boxes. They were also advised that they were going to make so much money from the deal that they might be tempted to buy expensive displays of wealth but were advised not to do so to avoid drawing attention to the source of their newfound wealth.