

the ordinary temperature of our dwellings should be sufficient evidence to a person of ordinary intelligence that, when employed in the household, it may, at the first thoughtless or careless act, become the cause of a frightful accident.

Now for the reason why these dangerous oils find their way into the market in defiance of legal prohibition :

The crude petroleum, as it comes from the wells, is not a simple substance, but consists of a mixture of a number of oils. The operation of refining the crude product consists essentially in subjecting it to a system of frictional distillation, whereby it is separated into some six or seven products, to which the commercial names of rhigolene, gasoline, naphtha, benzine, kerosene, etc., are attached.

The benzine or naphtha makes up generally about 15 to 20 per cent. of the crude oil, and for this the demand in the various industrial arts is by no means equal to the supply, in consequence of which it commands but an inferior price in the market ; in fact, considerably less than that demanded for the burning oils proper. Here, then, exists a direct temptation to dishonest or ignorant manufacturers and dealers to adulterate their stock of burning oil with oils of inferior price and dangerous quality. To what extent this reckless practice is carried on the community have no just conception, but the writer feels safe in asserting that it is as general as any of the trade adulterations.

So general has it been practised, in Philadelphia at least, that only three years ago an examination of 3,000 oil samples sold in various parts of the city and its suburbs showed that not more than one-twelfth of one per cent. of all the burning oils sold in the shops of this city were of sufficiently high grade to pass the fire test ; and it may be added that there is no reason to suppose that any improvement of this condition of things has taken place since the time when the examination was made. The constant occurrence, therefore, of accidents with coal-oil—so long as the cheap and highly dangerous products of the refinery are indiscriminately used to adulterate the comparatively safe-burning oil, the kerosene, or doctored, with equal impunity, into the numberless burning mixtures with alluring names that meet one at every turn—is a perfectly natural result, and one that should occasion no surprise. And so long as inspection is a farce, and the inspector and vender are beyond the pale of legal accountability for their deeds of omission and commission, just so long will coal-oil murders and disasters continue to be deplored.—*In Sanitarian, from Polytechnic Review.*