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Auto Shop

The Auto Shops

The present auto shop at Susquehanna and the Lumber branch is the third auto shop. The first was in Room 102, on the ground floor of the old high school, a former locker room. In about 1926 we had several boys who seemed to have capacity to learn, but could be reached only in subjects dealing with automobiles. We procured a junk car, manhandled it into the building and set it up as the basic apparatus for these boys to disassembly and assemble. There was little instruction. I think the director, whose office was nearby looked in occasionally. But it did provide the answer for these boys, and the experiment was successful. It

With this modest beginning, we looked about for a more commodious shelter. We fixed upon the sloping strage space provided under a newly constructed football grandstand, a bleak, dark and grimy place, which we mobbered into a sort of auto shop. ~~xxxxxx~~ Charles S amith and Harry myers were the instructors. This place served us well, although we almost froze to death in the winter. In this crude area, we explored our real needs and made plans and plans. We know we would have a better shop womeday. The Course was very popular, day and evening.

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When the board finally decided to build a vocational sho^l center, on the old Lundy plot, along Susquehanna, we had been at work designing a really good automotive plant for several years. We knew what we needed.

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The new and present shop.

In 1929, after the stock market fall, but before it's impact reached us, we began the building of the new shop. W.D. Shollenberger was the architect. This is a story of one of the most successful building operations I have ever seen. With the previous planning and experience to guide them, the faculty drew and redrew every detail of the new shop, and when the architect started his work, he had thumb nail sketches which were far more detailed than any construction planning we had ever seen. Nothing escaped our attention; it was to be a true machine for teaching. Since the usual vocational shop of that day was a standard w2 foot classroom, format, with end walls omitted. This was because the typical school was in this format. We broke with this tradition, after many tussles with the D&I standard planners. Our building was to ne a vast open space, 80 X 270 ft, clear span, with partial sky lighting to make up for the wide span and low ceiling. The walls were mostly glass, and on the exposed side, the windows reached to the floor. This is because we wished the dayligg to come in undre the cars. What a stir this low window area caused. Then, as now, school windows were to be 42 inches from the ~~xxxx~~ floor, even though in this case, if anyone could fall from the window, the grass was just outside. There was to be a complete general air changing system, which the flood of 1936 desroyed and we never missed it. There was also an elaborate auto exhaust system through ~~spots~~ in the floor, wich also jeld outlets for water, gas and air. The electrical outlets were dropped from the ceiling. We later removed the gas lines after the New London, Texas gas explosion where unsupervised space held leaking gas lines. The basement was excavated but unoccupied. All through the design, ~~xxxx~~ this then unusual building was a gonstant source of striving with the traditional standards in vogue at the time. We won most of

arguments, by simply wearing down the opposition, and later the DIP thought so much of the design that they printed a special bulletin showing the details of this innovation in school buildings. Lester K Ade, a Williamsport educator was then the State Superintendent of Public Instruction.

Some other innovations in this building: The floors were of superbe design, reenforced concrete, topped by a Master Builders metalacron surfact, cloored a buff shade(integral) and impreganted with carburondus for anti-slip. Remember, this was pre depression, the school district was not pinched for money, we nuilt out of imcome, and the educaotrs had their way about most things. One great mistake was made. The faculty design called for a ~~skax~~ crawl space under the floor, but at the last minute, the Board ordered the underfloor area to be excavated to 7 feet. This change was not coordinated with the mechanical equipment design, and as a result the area was, and is, a dank, unsanitary mudhole, where nobody ventures very often. There is no access except through a trap door in the shop floor. The building, ~~xkiskxx~~ witht its "temporary" boiler house(still in use, but expaned for enlarged service, cost 85,000.00 There were 16000 sqiare feet of instruction space.

From 1931 , when we occupied the building, to the present time is a long time in the hisotry of a school building. But with few exceptions, the building, is as good today as it was then, and for a high school auto shop it would still be an ideal facility. It has been used intensively, at least two shifts daily, 12 months a year, for every conceivable purposes, some very rough use as in wartime with cleated tractors, airplanes, and at least one airpland fire, and for instrument making, watchmaking and

electronic crystal manufacturing. The present faculty laments the lack of provisions for classroom space, because this was to be provided in an adjacent classroom building, but there is little that could be improved upon after 40 years after the original design. ~~This writer knows of no automotive training facility in the country which is a better educational plant.~~

The lesson to be learned is this. There is a direct relationship between the faculty involvement in educational building planning, down to the most minute detail, and the long range utility and effectiveness of the facility.

Note: After this building program, we fell upon the dark times of the great depression. To this day, we were never to have a first class building constructed for vocational education plant, although some quite adequate buildings were later provided. We shall try to describe some of these later.

Unusual features of this building.

Excellent lighting, including under car illumination

Built in provisions for anchoring engine test stands.

a complete exhaust system for 16 cars and some 20 engine stands. Glaze brick walls (since painted, glaze was not truly ceramic.

White tiled, terrazzo floored washrooms, self contained, easily supervised and very durable. Since rebuilt several times (two major floods and some rough student use.

Wall inserts for hanging apparatus. No holes drilled in walls.

A complete monorail hoist system covering all shop areas.

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5 The present faculty uses this facility little, seemingly because the usual commercial garage uses jack-type portable hoists etc.

There is no grease pit. The present faculty seems to wish for this, but at the time of design, and we think now, there are avoided in favor of air hoists. The pits are difficult to police and they are a deadly fire hazard. Gasoline vapor being heavier than air sink to the bottom of these pits, and a broken trouble light ~~and~~ or a tool spark can and do set of explosions. This writer would not now approve a pit.

There were no provisions for body work or paint spraying, and there have at time had to be improvised. We thought then, and still do, that body work should be conducted in a special area.

This show had a central drain running the length of the shop, with the floor sloping 1/4 inch to the foot toward the drains. And the drains were fitted with grease traps etc. Even today, after the Friday cleanup, the durable floor ~~was~~ is clean enough to eat off.

As a lesson for the local director, we take the time to elaborate on one of the many squabbles which arose from the design of this controversial building. We had given great thought to the floor, because most garages of the time, and unfortunately some in these advanced times, were dirty and grimy, so constructed as to make it impossible to get them really clean. We had noticed that the floors of the high school, then about 20 years old, were as good as new, although slightly cupped from very hard use. A plate in the floor indicate that this was a Master Builders' product, and we entered into extensive correspondence with the manufacturers.

the Portland Cement Institute, and the literature of high grade concrete work. The architect uses the Master Builders specifications, which were very rigid. The present writer was the building inspector, and he was determined to have a quality floor. He had to live with it.

When the floor was laid and troweled, it was a cement finisher's dream. Beautiful! There were brass strips to provide for expansion somewhat like terraza. The floor was carefully covered, taped, and kept moist for the required 30 days of curing.

A few days after the curing paper was removed, the floor began to fade out and have a hollow sound. Spnn it broke up into large flakes, and the entire building becamex tooked like a tray of potato chips.

Then came the big hassle, and this is the lesson for the director. Knowing the specs, and knowing that the high school floor had been a great success, as inspector, I had done everything possible to get the concrete sun contractor, ano a highly regarded contractor in Williamsport, to follow the specs more carefully as to the treatment of the sub-floor to obtain a good mixxx knit. These people I think thought the whole business to be a lot of college boy theory and that the specs were all wrong. When the arguments came up, the architect wilted and would not help us to make out point. The Portland Cement Association, probably wishing not to offend an architect and a contractor, would not make a strong statement in any direction, with a possible lawsuit in the offing. We almost got the potato chip floor. An array of local contractors bame in and gave as their expert opinion that the job was impossible, and the Board almost gave in.

Floor

7 But the Master Builders' representative, a man named Krimm, stood by his product and the specifications. Bless Him! Out of his own pocket, he brought two expert black concrete men in from Philadelphia to lay a few yards of a sample floor, by the correct method. This sample was ^{and}trpuled, properly cured. We got the Board up for a special meeting at the site. We gave them picks, sledges, blow-torched and heavy dropping weights and dared them to hurt our sample. Except that they chipped the durfact slightly(I think the sample is still there) they could not in any way hurt the sample. We won the toss, but even then the Board paid several hundred dollars for the services of an engineering firm in Harrisburg to investigate the possibilities(Probably because a lawsuit was possible. the engineers concurred with us, and the board surcharged the contractor for the cost of a new floor. Even then, our Master builder friends had to find a contractor who would replace the floor and bond himself to produce a satisfactory job No local contractor would touch it, and a man from Shamakin came up and did the job. This is the floor today. The general contractor surcharged the dub contractor and this small operator almost went bankrupt. And he was and is a good friend of mine.

The director, in the execution of his public responsibilities, must be zealous in the interest of his taxpayers. He must fight, as necesl as possible, to the bitter end in such a controversy. It's somehow dishonest for a public ~~xxxxxx~~ to compromise the equity of hispublic. In such matters, this writer has gained the reputation of being a stubborn, uncompromising troublemaker. It's an unescapable penalty for the privilege of serving the public. and as Harry Truman put it, "if you can't stand the heat, get out of the kitchen.